THE HAIR RAISING TRUTH

EVERYTHING YOU NEED TO KNOW ABOUT LOSING YOUR HAIR AND GETTING IT BACK - SAFELY!

SPEX
Acknowledgements

This book is dedicated to my mother, sister and my wonderful wife for all their love and support throughout this whole journey. I could not have done it without them.

I'd like to thank all the people involved in helping me get this project off the ground – you’ve been awesome and I’m forever grateful.

A big Thank You to Dr Feller for giving me my life back via some perfectly redistributed follicles. This in turn has put me in the position I am today to help you to pursue your hair needs and goals.

A number of sources have been drawn upon in creating this book; they are all listed in Appendix 1. These have been invaluable to me in my own HT research and in putting this book together.

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Introduction

Hi there! My name is Spencer but most hair loss sufferers throughout the world know me by my alias ‘Spex’. I’m a hair transplant veteran of 10 years and eight surgeries (four strip, four FUE – you’ll learn all about these techniques in chapter six). I am now a patient mentor and counsellor online to help others who are in a similar place to where I was ten years ago. I also advise and guide in person and have shown my hair transplant results to well over 500 people in the last six years.

Because my own personal journey with hair loss was pretty traumatic, I set up the website www.spexhair.com and am writing this book to share my experiences, research and knowledge with you. I hope this information may then prevent you from making the mistakes I made and facilitate your goals of minimising your hair loss and maximising your potential hair transplant.

Now that I am now in the fortunate position of attaining my goal, I feel it is important to give something back to the community that has supported me in my journey. I act as a showcase here in the UK. I offer this service for free in order to give something back and to make people in the UK aware of such a good doctor. Dr Feller ultimately gave me back my life and I feel it is important that people are made aware of what is actually available to us. There are other good doctors and you’ll find recommendations in chapter eight.

I offer myself as a hair transplant showcase because there was nothing available to me when I embarked on the hair transplant road and feel it would have helped me greatly. It is vital that people interested in having their hair restored through a hair transplant get as much information as possible and are able to actually see the results that can be achieved in person.
Whilst ‘Spex’ is a renowned authority within the online community, I have maintained my anonymity and kept this whole journey a secret. Only my immediate family knows that I have had a hair transplant; no-one else does, not even my best friends.

I have led a double life for all this time, keeping my active role within the hair loss world well hidden from my real world. I have kept a hat on my world (literally and metaphorically), avoided numerous events and lived under a veil of concealer combinations, while I focused the majority of my time battling in pursuit of a solution to my hair loss issues.

Although I will not be suddenly admitting to my social world that I have been hiding this secret from them, I have now decided that it is time to ‘come out’ in the hair loss world. So you will now get to see my whole face rather than just my hairline! I have been called the Batman of the hair loss world – so now you get to meet your ‘Bruce Wayne’!

**I’ve decided now is the right time** for me because I’ve met with hundreds of guys in person, helped thousands online and gained such a wealth of vital information, that I wish to pass on to you to make your journey and your research easier. I have been continuously sharing on the forums and in person on a daily basis and over the years many guys have said, ‘You should write a book with all you know’. So this is it! This book is about giving you the support you need from one brother to another.

I can’t continue to be as active on the forums as I have been due to family life and work commitments – believe it or not I also run my own business and I’m an active parent of twins (which is even more time and energy draining than HT surgery!). So now is that time; time to compile all my knowledge, experiences and hard-earned wisdom into this book, to share my journey in order to help you on yours. Sharing my journey is about paying it forward to give you a heads
up on this industry, saving you confusion, frustration and further emotional trauma.

With this book and my website, my role now is to educate you with the necessary facts. I have a phenomenal passion for educating others, as anyone who has met me will vouch for. This industry is cloaked in smoke and mirrors to keep you misinformed and confused. I intend to cut through all that.

This knowledge can help you to make informed decisions regarding your own hair loss, without having to dredge through mountains of contradicting information. **I know exactly how you feel and my journey can 100 per cent help yours.** I don't want you to fall into the hands of the unscrupulous of this industry, as I did.

I’ve been there and I truly know where you’re at. Hair loss ruled and ruined nearly a decade of my life and hopefully I can prevent that happening to you. Ultimately I want to provide you with the perspective I never had and to help you take a step back, so you can make the right decisions for you; decisions that are based in knowledge rather than fear.

**There are thousands of guys just like you right now** feeling exactly the same way about their own hair loss. You may well be feeling alone, hidden and lost, not knowing where to start, who to turn, who to trust or why this thing is happening to you. Your self-confidence and self-esteem may be at an all-time low. Inevitably you will be feeling vulnerable right now. You might also be scared, feeling isolated and violated due to the lack of control over your own body.

Hair loss creates a deep pit of emotions; it becomes an all-consuming focal point and drains your everyday life. It is constantly there at the back of your mind, if not at the front. This roller coaster of emotion, coupled with confusion, naivety and vulnerability, is what the industry feeds off. Sadly there are too
many people, surgeons and clinics that are only in it for the money and prepared to do pretty much anything to your head if it earns them a buck.

**The first thing I need to tell you is... there is no miracle cure!**

There are ways to help fight against the curse and cause of hair loss and as a last resort you can also help restore lost hair in a very natural way via hair transplantation as I have.

**This is a long term decision and commitment**, not a short term one – it’s not a quick fix. It’s hard, I know, to process the information, but it is essential!

I also advise you spend as much time as possible researching and reading through the internet forums (I will advise on which ones later) to help educate yourself and to interact with other guys just like you, before making any rush decisions on hair transplant surgery. I never had the support initially until I found many like me within the online community, and it was a much smaller community back then. Now it is huge and everyone wants to help.

I have met hundreds of repair patients who all went about it too fast and ill informed, just like I did. I don’t want you to make the same mistakes!

**Most importantly, always be wary of being told what you want to hear, as opposed to want you NEED to hear.**

**I was extremely misinformed starting out**, as most are, when I ventured down the hair loss road at only 23. I was young, vulnerable, naive and desperate. From the start of my hair loss journey, I wanted a quick fix to resolve my issue. It was devastating; having been a confident teenager, I was rapidly losing all self-confidence and self-esteem. It affected my life to such a degree that I knew I had to attempt something in order to somehow get back to the young carefree man I used to be. I listened to what I wanted to hear.
It started to affect my social life, as it possibly is affecting yours, and I lost friends indirectly, as I didn't want to venture out without a hat. I became obsessed and felt ‘trapped’ within my own oppression.

I paid thousands of pounds in desperate attempts to fix my problem as fast as possible. I was misled and manipulated with regards to wigs, lotions and laser treatments, which were all entirely unsuccessful. The sheer disappointment was emotionally draining, never mind the expense and time endured going down the wrong roads.

I decided to ‘travel the world’ and become anonymous (I ran away, basically), to give me time to try come to terms with this dreaded curse. But although we can run, we can’t hide; least of all from ourselves, from the one looking in the mirror (every mirror you pass), studying today’s reflection and how the sunlight magnifies the loss… So while I was travelling, I was still haunted by my shadows and on the lookout for anything that could ‘help me’.

Then in 2000 I came across an advert for hair transplantation with a now infamous HT large chain clinic, (the McDonalds of the hair loss industry). This was a major step in the wrong direction as, while the company was advertising the world, it ended up causing me more heartache and disfigurement than I could have ever imagined. I went to this clinic four times! Yes, four. My only excuse is the internet was not the force it is today and I didn't honestly believe I had any other option. After my lengthy journey with further repair work, I did actually finally crack it and find peace with my hair.

Over the 10 plus years of this journey, I’ve continued researching and through helping others I realise there are very common, very important questions which everyone starting out needs answering. My aim is to answer them in this book.
In addition to my information, advice, tips and tricks, I will link you directly to information being discussed by actual patients, results, and specific key topics that you want answers to in order to gain some clarity.

I have purposely aimed this at young men who are concerned with hair loss and have not included information for women who may be experiencing thinning or loss of their hair. There are two reasons for this: firstly because I can only speak from my experience as a male and of the male-oriented hair loss issues and solutions; and secondly because female hair loss is a whole topic on its own, with its own causes and remedies which will be addressed in a second book written specifically for women.

I hope you will find this a phenomenal resource which benefits you on many levels; to inform you and make you aware, to support your journey back to YOU, that carefree young man who never thought twice about his hair.

Because, you know what? Life’s just too short to waste it worrying!
I was the tender age of 20 when I noticed that my hair had started to thin. The nature of hair loss though is that by the time you notice it, you’ve already lost a substantial amount, so the process probably started when I was maybe 18 or 19. I had a shock of hair as a teenager, loads of it. It was my signature. I was even called ‘Wily Cat’ because of my hair. It had a mind of its own and I would tame it into a sort of just-out-of-bed look. It was thick and I could change the style to suit my image at the time. I had options and I made the most of them. I was a popular lad, captain of various sports teams, played rugby for England. I was a hit with the girls. I was a bit of a cool dude to the outside world. And maybe a bit arrogant too.

But in my inside world I was far from a cool dude. I was a mass of churning anxiety and emotion. I’d lost my Dad at 16 and was just about dealing with the washing machine of emotion that his death had created. It’s a tough time for a boy as it is. You’re just emerging from puberty and starting to feel your way into being a man. It is a stage of transition from boyhood to manhood where you aren’t really either man or boy but somewhere in between. Tribal cultures have rites of passage or initiation ceremonies to mark this transition. In our culture we have nothing in particular, except perhaps a load of arguments with your parents.

When your dad dies so suddenly in this transition period, you are thrust into being the man of the house (or at least that is what you think you are). I coped by being this wily dude who was pretty OK, yeah the world can’t touch him, he’s achieving, achieving, achieving. Inside you are really just a very confused and frightened young man desperately trying to make sense of this cruel world;
trying to work out who the hell you are and hoping to God (or any source of divine power) that if you just keep on focusing on being this strong achiever then eventually the emptiness will go away and you will actually believe your own stories. You pray that the cool dude on the outside will actually find his way inside.

And then bam! Another curveball: hair loss. Only this time you are totally out of control because hair loss happens to you and there is not much you can do to stop it. Most men will lose some or most of their hair eventually. Life’s unfair twist is when you start to lose your hair, just as you’re gaining the vote.

I was also the only one of my peer group that was losing his hair. None of my friends were experiencing this. How unfair is that!? And of course I was ripe for the teasing. The cool dude ain’t so cool any more. Except my friends didn’t know the half of it. They had just noticed a few thin bits. I knew the truth. Wily Cat was going bald. The identity of ‘Wily Cat’, the scruffy, carefree, popular dude, was being taken away from me hair by hair.

Now I was angry as well as frightened and confused, and very, very vulnerable. And so I hid the truth. I stopped going out, I wore hats everywhere, I avoided girls. I was paranoid that someone would see through my attempts to cover up my rapidly (or so it seemed to me) receding hairline.

I lost friends because they couldn’t understand why I wanted to stay home all the time. But how could I tell them why? They weren’t thinning. They wouldn’t and didn’t understand. Losing your dad is one thing, it is tangible and even if it never happened to you, you could relate to how you might feel if it did. But losing your hair? Where was the big deal in that!

But it was a big deal to me. A HUGE deal! I had to keep it all totally private. Heaven forbid that I would be perceived to have any weakness. I was running around in circles of macho, rugby-playing guys and any chink in the armour
was a great excuse to knock you down a peg or two. I was Samson and I couldn’t let them know that Delilah in the form of hereditary male pattern baldness was taking away my hair and my strength. It had to be my secret. Only my sister and my mother knew anything about it. They were the only people I could confide in and offload my anxiety onto.

I isolated myself in so many ways. I missed out on parties and events rather than be seen. As I went through the journey of hair restoration in my 20s, I isolated myself for months on end. I would be ‘away’ a lot and frequently ‘ill’. At a time when young men are being riotous and enjoying life, I was isolating myself and enduring years and months of treatments, concealers and restoration. Friends stopped asking me out because I kept having excuses for not being able to go. My self-esteem was at rock bottom but I couldn’t let my guard down and admit what was going on. It’s such a personal issue.

Although I am still in touch with many of these people, none of them know about my hair restoration, or my life as Spex. For all these years I have led a double life and still do. So as you are reading this and probably feeling isolated and vulnerable too, with shattered confidence and perhaps no-one to turn to, know that you are not alone. There are thousands of men, young and mature, who have been where you are now; who are where you are now; and who will be where you are now. This is a huge club we belong to.

The irony is that I could so easily have belonged to another club: the club of men who have embraced their hair loss and gone for the clean head look. Another group of rugger boys whom I knew but who were not my mates at the time, have all lost their hair, where none of my peers and social circle have. Had those guys been my social circle back then, I may have taken an entirely different approach, had a very different journey and have a very different look today.
For so many of us losing your hair is losing your identity. You only realise just how much of who you are is bound up in your self-image, and how much your hair is a vital part of that self-image, when your hair starts to disappear.

But you are not your hair. You are so much more than your hair. Whether you embrace baldness or embark on the journey of doing your best to keep a full head of hair, if you can understand and manage the relationship between your hair, your self-image and your identity, then you will feel more in control and you will make better decisions.

I wish I’d known then what I know now. You, because you are reading this book, will be so much better informed than I was when I was 20 and panicking.

The first bit of information that I want to share with you, then, is how does this identity thing work in relation to hair loss and how can we manage our identity, our self-image and the attendant emotions to keep our hair loss from ruining our lives?

**Hair and identity**

Throughout history our hair has been bound to our image and identity. Hair is referred to as our ‘crowning glory’. It is one of the first characteristics that other people notice about us and it’s how we describe others and ourselves: ‘He’s a tall, blond guy, … ‘She’s a beautiful brunette’… ‘Medium build, dark, curly hair’… ‘A shock of thick, white hair’… ‘Balding guy with big biceps’… ‘She’s a real redhead!’

Like it or not, our hair is a large part of who we think we are and what we present to the world. It is inevitably present in our concepts of beauty. For young women particularly an obsession with hair is encouraged from the day they get their first doll.
Hair is inextricably woven into the fabric of our culture. Our myths and fairy stories often have heroes and villains defined by their hair: Samson and Delilah, Cleopatra, Prince Valiant, Rapunzel, Goldilocks. Hair and hairstyles define entire eras and cultural movements such as hippies, skinheads, mods and rockers, the Beatles, Hells Angels, etc.

Likewise, religion and spiritual disciplines often consider hair, or its absence, of particular significance. Many sects of monks or nuns require shaving of the hair as a demonstration of their withdrawal from worldly pursuits and their entrance into the spiritual world. Conversely, Sikhs and other religious groups prohibit any cutting of the hair at all. So there is an enormous symbolism attached to our hair.

Where a full head of hair is defined by societies as the norm, bald or balding men are often regarded as older, weaker and more ineffectual. Studies suggest they are more likely to be passed over for promotions or pay rises than their peers. They are often seen as less desirable as potential mates, lacking in virility and less capable of providing for a family. Even more significantly, according to British Journal of Psychology 1995, balding men have lower levels of self-esteem than their peers, suffer more from depression, are less sociable and are less likely to succeed in life. And of course balding men are the brunt of jokes and teasing, especially if they are in the public eye.

We need to recognise that hair is a huge commercial business – both if you have plenty of it and if you don’t. Commercially, society has a vested interest in keeping our hair at the forefront of our mind and our self-image. Around £5.25 billion is spent in the UK annually on hairdressing and about $42 billion in the US. The hair loss industry (as distinct from the hairdressing industry) is worth
around $3.9 billion. There are a lot of people relying on your continued obsession with your hair!

At a more personal level though, you are not your hair. You are defined by many other aspects of your ‘self’. You probably didn’t even think that much about your hair being such a huge part of your self-image – until it started to disappear. You just don’t ever think that your hair is quite so important to your self-esteem, your confidence, your very identity, until – suddenly or gradually – it starts to leave you.

**What is ‘identity’?**

Our ‘identity’ is who we think we are. We construct our identity from a series of personal choices made over our lifetime with regard to who and what we associate with. Let’s take a few examples and construct a dummy identity for ‘Joe’.

Joe (26 yrs) loves rock music and so associates himself with other rock fans and with rock musicians. He emulates their style of dress, wearing his beaten up leather jacket everywhere he goes and sports a bandana whenever he can. He has grown his hair long and lets it hang loose and flowing. He loves animals and has a black Labrador called Black Sab(bath). He volunteers in the RSPCA shop at the weekends. He works as a graphic designer and enjoys composing ‘soundscapes’ with his electric guitar for a hobby. He belongs to a music group that composes and performs soft rock and electronica in his local area. He’s a gentle man and believes that chivalry is a dying art, one that he intends to revive.

So already we are getting a picture of ‘Joe’ and starting to see how he is creating his identity (gentle bloke, lover of music and animals) and his self-image (how he portrays who he is to the outside world through what he wears –
leather jacket and bandana – how he wears it and how he conducts himself). Let’s add another piece to the jigsaw.

Joe’s hair is receding. He is a victim of male pattern baldness and at 26 is class III on the Norwood scale. His bandana covers the receding hairline. He does not know whether the hair loss will worsen or not.

Now, we tend to identify ourselves in relation to others who share similar interests or attributes. Whether or not you identified with Joe the music man and animal lover, you certainly will identify with Joe the hair loss sufferer. We don’t know how Joe feels about his hair loss, whether he sees it as a threat to his identity and self-image or whether he embraces it, but nevertheless we identify with his plight and he just became ‘one of us’.

However Joe is not merely a man losing his hair. He has many other attributes, interests and values that make up who he is. He is not his hair, though his hair is one of the ways he expresses his identity and personality. He chooses to wear it long because that expresses his rock music associations. However he also expresses those associations in other ways too.

Hopefully this is making some sense. You are not your hair or your lack of hair. You are a rounded person with many qualities, attributes, values, beliefs and interests that have nothing to do with your hair. Your hair, how you wear it and how you style it, is an expression of who you are, but it is not who you are.

This is an important distinction to recognise. I didn’t even know, let alone get, this distinction at 20, when my world was upside down and my emotions were in turmoil. I thought my hair was who I was. I would have done anything, almost at any cost, to preserve my hair, my identity and my Wily Cat image.

I did do many things which I would not have done if I had firstly separated my image and my identity, and realised that Wily Cat was more than my hair. I
would probably have taken the same path, but with more forethought, definitely more research and less desperation. While you cannot control hereditary male pattern baldness you can, and do, control and choose your identity and your image. Wily Cat was not just a hair style. Wily Cat was many things and still is. I am still Wily Cat when I choose to be.

You do not have to let your hair loss dictate who you are. Who you are is your choice. How you choose to express who you are is your choice. Your image is your choice. Hair loss changes your options, but it does not have to change you – unless you allow it to.

**Identity and self-image**

So if identity is who you choose to be, and is defined by who and what you choose to associate with, then self-image is how you see yourself and how you choose to express your identity to the outside world. There is also a difference of course between how you see yourself and how the outside world sees you.

Your image is also determined by your choices. You wear certain clothes because they convey an image you want to show to the world. Equally you wouldn’t be seen dead in other things because they give off entirely the wrong image. Your hair obviously is part of that physical image and when you start losing your hair, it can seem like your whole image is disintegrating. This was definitely the case for me.

And we have a choice: embrace the thinning hair by changing our style, or shaving it all off, or decide to do our best to keep what we’ve got. Either way we are making a choice of physical image.
The outside world of course may see us quite differently – and that we cannot
control. We can manage our reactions and responses though. And other people
won’t see us anything like as negatively as we see ourselves.

Our physical image is also just a part of the overall jigsaw. We also have a
verbal image (the sound and tone of our voice, our accent, our speed of speech,
the language we use) and a kinaesthetic image (our feelings and emotions and
how we express them: are we shy, moody, gregarious?).

So when you actually start to consider all the different facets of your ‘self’ and
your image, your hair is really just a small piece of the whole jigsaw of your
life. So why does it affect us so deeply?

Well, it affects us so deeply because throughout history ‘good’ hair has been
one symbol of strength, virility, power and youth. Biologically we are
determined to find the ‘fittest’ partner to mate with – fittest meaning the one
most likely to produce strong and healthy children – because, until very recently
in our history, our survival depended on creating healthy offspring who would
look after us as we aged. Deep in our biology we are programmed to seek out
the ‘perfect’ partner. For men that meant a good mother for his children (or a
series of good mothers as the wider he spread his genes, the more likely they
were to survive). For a woman, that meant a man who was strong and would
provide for his offspring until they could provide for themselves.

Certain criteria came into the mix and good looks were certainly one of them,
though bear in mind that good looks have trends too and beauty is certainly in
the eye of the beholder, so there is no fixed measure of what ‘good looks’
actually are. Facial symmetry has been researched as a factor in attractiveness,
but there are no definitive conclusions. Various research studies have suggested
that body size and shape are more important than hair in the attractiveness
stakes.
Attraction is usually physical first though and then the other attributes come later. So our huge concern with our image has come about biologically and historically through a fear of not being able to keep our gene pool going. And this is why our emotional responses are so strong. Losing hair taps directly into our biological fear that our genes will not survive. There is plenty of evidence that baldness does not stop you from getting the girl, and does not stop you from being powerful, virile, sexy or youthful. But somehow that evidence gets diluted in our universal obsession with image and our perceptions of what is attractive.

**A bit of brain science**

This is to help you understand how our fears and emotions around hair loss get wired into our brains and seem so difficult to control. I was blown away when I learnt about this but it made so much sense!

As we live our lives, experiences mould us. Connections are made in the brain and connections are broken. Some experiences stamp themselves so firmly on our brains that nothing will dislodge them (particularly those which activate the emotional centres of the brain); others are changed more easily. Experience is sculpted through the pattern of connections between brain cells (neurones) and these patterns are constantly in flux, which is a good thing otherwise we could never retain or change thoughts and behaviours as we do.

Some connections are more hard-wired than others and at a deeper unconscious level. The centre of the brain that controls this is the amygdala, storehouse of our emotional memories, part of the limbic or emotional system. We take in information through our senses – sight, hearing, touch, taste and smell – and this information reaches the amygdala before it gets to other parts of the brain. If what you have sensed is linked with danger, the amygdala springs into immediate action forcing you to react.
The amygdala does not however concern itself with rational analysis; it merely acts on gut feeling on the basis of information provided. As we know gut feeling is hard to ignore. Lagging behind comes the further information from the higher brain centres in the cortex, which is based on a more cerebral (rational) analysis of the incoming sensory information. Hence we jump when startled, even before we analyse whether what startled us was of any real danger.

However under the logic of evolutionary survival, danger is not something to be constantly relearned, so the wiring of the amygdala is particularly strong. And of course, danger does not have to be physically life-threatening. Any fear which we have developed – e.g. of being emotionally hurt, of getting it wrong, of what other people think of us – can be seen as danger by the amygdala. Its purpose is to ensure we survive and to protect us, so it will react to avoid anything that threatens us.

If we perceive losing our hair to be a threat to our survival, then the wiring that connects hair loss with fear, anxiety, panic and even depression, can be very strong indeed!

AND there are many more connections from the amygdala to the cortex than vice versa (think multi-lane highway versus single track country road!) so while the higher brain centres can exert some control over their emotional colleagues, the emotional brain has a much greater potential to overrule the higher brain. Explains a lot doesn’t it? There is a reason why those emotions and feelings run so deep and so strongly!

When you put all this together with trying to find your feet and establish your identity and your image as a young man, it’s hardly surprising that hair loss can hit us so hard.

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There is hope though! Even before you start down the track of trying to manage or disguise your hair loss, you can help yourself with techniques to manage those emotions and get yourself into a more positive and resourceful mental state.

Essentially all mental and physical training is based on setting up the brain cell connections to achieve the result you want. Hence visualisation is such a powerful tool and recommended by all sports psychologists because it stimulates the desired cells to wire together. All the techniques that performance coaches use (visualisation, affirmations, positive self-talk, goal setting, etc) are designed to weaken old patterns of thinking and generate new patterns in the brain.

So I’ve enlisted the help of a coach to put together some techniques to help you manage your thinking and your emotions around hair loss. They are the two mp3’s entitled ‘Find the Freedom Within’ and ‘Victim to Victor’. All you need to do is listen and follow the instructions. They are there to help you with your mindset, because if you can approach the rest of this book with curiosity rather than desperation, it will help you make the best decisions for you and save you just so much money and heartache.

Another bit of useful brain science

Undoubtedly you only notice the thinning hair of others when yours is also thinning. If you have a full head of hair, you don’t notice the hair on others unless it suddenly changes. Before you noticed your hair loss, how much attention did you pay to others’ hair? Not much would be my guess. Neither did I. How much attention do you pay to others’ hair now? Lots!

Have you ever noticed that if you like a particular type of car, you see lots of them on the road? But you don’t notice the makes that don’t interest you. They
are just cars. There is a particular part of the brain that manages this. It’s called the Reticular Activating System (RAS). Without getting too technical on this one, it’s the part of the brain that controls the activity level of the brain and determines what we pay attention to. So if a Porsche is your dream car, you’ll notice every Porsche on the road. If your hair is thinning, you’ll notice every other bloke with thinning hair and those with the head of hair that you covet. And you do all this unconsciously – i.e. you are not consciously aware that you’re paying attention to these things, nor do you think ‘I’ll pay attention to xyz’.

There is also a saying that ‘energy flows where attention goes’, which means that we tend to attract what we pay attention to and we put activity and effort into things that draw our attention. You are putting a huge amount of energy into investigating hair loss if you are reading this. So we put most energy and activity into the things that our RAS is drawing our attention to.

Why is this important? Because other people’s RAS will be actively drawing their attention to what is important to them, which is NOT your thinning hair – unless they are losing theirs too.

One of the things we discuss a lot on the forums is this fear that we are no longer attractive with thinning hair; that we have become ugly, that girls won’t want to know. So yes, if a girl’s RAS is putting her attention only on men with a full head of hair then maybe you won’t draw her eye. But maybe her RAS has other more important criteria in looking for a mate. Maybe some of your other attributes or interests are EXACTLY what she is seeking out. Kate Middleton clearly wasn’t making her choice of prince on the basis of his hair. Enough said!

Because we put so much attention on our hairlines, we assume everyone else is too. They generally aren’t. Don’t hide your light under your thinning hair.
Mind your language

A huge amount of research has been done in the sporting arena on the impact of ‘self-talk’ on performance and direct correlations have been found between negative self-talk and poor performance, and positive self-talk and good performance. Most sports now have sports psychologists and coaches who work with the athletes to help them stay focused, to let go of past experiences, and to control their thoughts and their internal chatter.

This also has relevance for us. The words that we use both to ourselves and to others can have a huge impact on how we feel: talking about ourselves as ‘victims’ or ‘sufferers’ of hair loss just exacerbates our feelings of isolation or lack of control. By using those words we bring more attention to our suffering, we feel worse and it becomes a downward spiral of despair. But even just saying in our mind something like ‘I am experiencing hair loss and I accept it; it is very common among men of all ages and I will not let it ruin my life,’ can help put us in a more resourceful state of mind. I’m not suggesting that we go skipping about, pretending that all is fine when it isn’t. However it is our own choice as to whether we beat it or we let it beat us.

As W E Henley wrote in his poem ‘I am the master of my fate. I am the captain of my soul’. At the age of 12, Henley contracted tuberculosis of the bone. A few years later, the disease progressed to his foot and physicians announced that the only way to save his life was to amputate directly below the knee. It was amputated when he was 25. He wrote the poem from his hospital bed in 1875. He went on to live to 53, managing with one foot.

We cannot control everything that life throws at us. But we can control how we respond to it. We can let our hair loss control or even ruin our lives or we can become masters of our fate and captains of our soul.
Although this is a long and arduous lifetime journey, it can also be a positive one. If you take your time, do your research and read this book from cover to cover before making ANY decisions, then you can feel like more of a victor than a victim.

Just one more bit of psychology before we move on to put hair under the microscope.

Elisabeth Kübler-Ross MD (1926 –2004) was a Swiss-born psychiatrist and the author of the ground-breaking book *On Death and Dying* (1969), where she first discussed what is now known as the Kübler-Ross model. This model has now been adopted as the general five-stage process that everyone goes through when they experience sudden change or trauma. I include it here because I believe it is relevant to the trauma we experience when we first discover our thinning hair, particularly at an early age.

The stages are these:

**Denial:** ‘This can’t be happening, not to me.’

Denial is usually only a temporary defence but this first stage of discovery is a huge, huge shock, there’s no doubt about it. It’s the stage where you start checking your hairline every time you go to the bathroom just to see if it’s really thinning a bit. You might be checking the floor when you shower and thinking that there are an increasing number of strands to clear up. You might be asking discreet questions of friends and family members, while trying not to give away your reason for asking. Sooner or later you will realise the inevitable.

**Anger:** ‘Why me? It's not fair!’; ‘How can this happen to me?’; ‘Who is to blame?’

When you get to this stage you know that denial cannot continue but now there is the maelstrom of emotion coming at you in waves and you can be a pain to be around. All the implications of losing your hair hit you like a ten ton truck. You
may resent people who aren’t losing their hair. You probably start trying to cover up the loss and grasp at any straw that might help stem the flow.

This and the next two stages are the most dangerous for making any kind of decision regarding treatment or restoration but sadly this is the time when most men will embark on the journey from which, once started, there is no return. If you are here, please, please, please, allow yourself to get through to the final stage before you make any decisions. Decisions made in panicky haste will end in regret and you very well might make matters worse.

Bargaining: ‘I'll do anything to get my hair back.’; ‘I will give my life savings if...’
This third stage involves the hope that you can somehow postpone or delay the inevitable. In desperation you are very likely to make bad decisions, waste money and be vulnerable to the predators in the hair loss industry who promise you deliverance from your woe and then just add to it.

Depression: ‘I'm so fed up, why bother with anything?’; ‘What's the point?’
This is effectively a grieving stage. You are grieving all the things that you think you have lost. The certainty of your hair loss hits you. You may isolate yourself and remove yourself from your social circle. Hats become your new fashion accessory of choice. The best thing you can do is to give yourself some time and just sit with the emotions, a box of tissues and a punch bag. Confide in a friend who can be there to support you. Let the emotions flow through and out. Cry when you need to, punch the bag when you need to, rant at your friend. Just don’t bottle things up. If you can take control of this stage and help it along on your terms, then it will soon pass.

Acceptance: ‘It's going to be okay.’; ‘I can't fight it, I may as well prepare for it.’
In this last stage, you accept your male pattern baldness. You may choose to live with it or try to do something about it. Many men will choose to accept their hair loss as part of life. After all it is a normal genetic trait and there are plenty of those traits that we can’t control (height, bone structure, handsomeness). We can either accept the genetic cards we are dealt or try to change the hand. Either way, the emotional storm has calmed by this stage.

Once you have negotiated the minefield of the ‘bargaining’ phase and the ‘grieving’ phase, you are in a much better place to make rational and informed decisions that are right for you, particularly about non-reversible remedies such as hair transplants.

Whatever stage you are at, just try to read on through this book with curiosity and calm. The old adage ‘Act in haste, repent at leisure’ is so, so true when it comes to dealing with your hair loss! Before you touch another hair on your head, take this journey with me and feel empowered to make the best decision for you at the end of it. So first stop: let’s look at this pesky stuff called hair.
Everything you wanted to know about hair but were afraid to ask

In this chapter I’m going to share what I’ve learnt about the construction of hair and what we need to know about it in relation to why hair loss happens. Understanding how hair works will help in understanding why some products and treatments help slow down hair loss and why some are a pointless waste of time and money. It is quite a technical subject and not always fascinating!

It helps firstly to understand how hair is constructed, because what we think of as our hair – the bit we wash, cut, shape, etc – is actually just the dead end of the hair shaft. There is a whole lot more going on under the surface of the scalp.

Structure of the hair and hair follicle

As you can see from the diagram, the hair follicle comes up from the deep skin layer (dermis) and out through the epidermis of the skin (the surface layer). The follicle itself contains several layers and structures that all have separate functions, including the dermal papillae which provide the blood supply to the follicle; the bulb which is the base of the follicle and the living part of the hair;
and the sheaths which surround the follicle and serve to protect it. The hair follicle must function properly in order to maintain a healthy head of hair. Each follicle produces one shaft, about 0.1 millimetres in width.

By the time the hair shaft emerges from the skin to become the hair we can see and touch, it has become a hard protein (keratin).

Also important to the hair structure is the tiny erector muscle that causes the hair to stand on end (when we’re cold or on high alert) and the sebaceous gland which produces sebum, a vital substance that creates a plug to cover the opening to the growing hair follicle and conditions the hair and skin as the hair grows upward from the skin surface. This is what gives hair its waxy sheen or greasiness if the gland is over-producing sebum.

Put together, this whole structure is known as a ‘follicular unit.’

Follicles may also be found in groups of two or three (rarely more) where they are so close together that they form double or triple follicular units – as illustrated in this picture. There is still only one hair per follicle.

The significance of recognising follicular units as the fundamental grouping of scalp hair is huge. This understanding has led to a revolution in the techniques of modern hair transplantation and given us a whole new perspective on the harvesting, movement and implantation of permanent hair into areas of balding scalp.

So let’s examine this follicle in detail.

The outer root sheath, (trichelemma), is the outer layer that surrounds the follicle in the dermis and then blends into the epidermis on the surface of the skin, forming the pore from which the hair grows.
At the bottom of the hair follicle, the bulb contains a small collection of specialised cells - the dermal papillae. These cells provide the blood supply to the follicle and contain DNA which is at least partially responsible for determining how long the hair will eventually grow, how thick it will be and what the characteristics of the hair will be.

For many years, scientists thought that hair actually grew from the dermal papillae. Recent evidence shows that the elements that control hair growth can be found all the way up the follicle to where the sebaceous glands are attached.

If the dermal papillae is removed (which sometimes happens during a hair transplant) the hair follicle may still be able to regenerate new hair, although the new hair may not be a ‘normal’ (for you) healthy looking terminal hair. It may be shorter, thinner and more kinky or wavy.

**Types of hair**

There are two types of hair: terminal and vellus. The terminal hairs are the thick, strong, usually pigmented ones that constitute the greatest volume of our hair. The vellus hairs are the very fine, short, lightly pigmented hairs (baby hairs) that can be often detected around the hairline, and throughout the scalp, as well as the light ‘fuzz’ elsewhere on the body.

This difference is significant because in the balding process the terminal hairs gradually undergo a transformation called ‘miniaturization’. They become shorter, finer and less coloured; they become vellus hairs.

In addition to these two types of hairs, the individual characteristics of the hair are very important in determining appearance (including the appearance of balding) and styling options. These characteristics include colour, curl or kink, calibre (cross-sectional area) and density (number of hairs per square inch). For
example, although African hair tends to have a lower density than Caucasian
hair, its extreme curliness lends it a great volume. Caucasian hair has the
highest density but tends to be finer (low calibre) and straighter and hence has a
lower volume. Asian hair tends to be very coarse (high calibre) but has the
lowest density and is also very straight.

How hair grows
At any given time, about 85-90 per cent of a person’s terminal hairs are actively
growing. This growth phase, called Anagen, can last for two to seven years,
though the average is about three. During the Anagen phase, the cells
surrounding the dermal papillae form the root of the hair. These cells are
constantly dividing and, as new cells are formed, they push the older ones
upwards where they begin to change shape. By the time the cells are about one-
third of the way up the follicle, they are dead and have turned into keratin. This
is what we recognise as hair. Scalp hair grows at an average rate of about 0.44
millimetres a day, or about half an inch per month.

The next stage in the hair growth cycle is Catagen. This is the end of the active
growth period. The hair stops growing and becomes detached from the base of
the follicle forming a club hair. The hair bulb begins to break down, resulting in
the follicle becoming shorter. A small section of the outer root sheath remains in
contact with the group of cells that formed the papilla. This period of
breakdown or change lasts about three weeks. As the inner root sheath breaks
down, the hair remains in the follicle due to its shape. On average, one per cent
of follicles are in the Catagen stage.

The remaining scalp hairs not actively growing are in a resting state called
Telogen that, in a healthy scalp, lasts about three to five months. When a hair
enters its resting phase, growth has completely stopped, the bulb detaches from
the papillae and the shaft is either pulled out (during combing or washing, for example) or pushed out when the new shaft starts to grow.

When a hair falls out on its own, a small black bulb can often be seen at the end of the hair. If it’s pulled out while it is in its growth (Anagen) phase, it will feel painful and a white, sticky mucus swelling will often be seen at the bottom of the hair shaft. Most people assume that pulling it out means the hair won’t grow again.

But cells of the dermal papillae and the growth centres found along the side of the hair shaft near the sebaceous gland will remain in the place after the hair is pulled out. These cells will multiply and cause a new hair to grow at the same location in a month or so. So pulling out a single hair should not kill that hair (nor will it stop the grey ones growing, contrary to the popular myth!).

After the Telogen stage, the cycle returns to Anagen and the lower end of the root germ begins to grow downwards and forms a new bulb around the dermal papillae. The upper part of the germ forms the new cells that lengthen the follicle below the club hair. The new hair may then push the old hair out.

On average, humans lose about 100 hairs per day. Most people will think nothing of it when they see stray hairs in the sink or shower. And we tend to shed more in the spring and autumn than in summer or winter. ‘Seasonal shedding’ is a normal occurrence; however it does have much greater significance when you’ve had a hair transplant and I’ll cover this in detail in chapter seven.

It’s when you notice that there seems to be an excessive amount of hair in the sink or on your comb that you usually start examining your scalp with more scrutiny. Unfortunately by the time you notice you are balding, you have usually lost up to 50 per cent of your hair. Help is at hand though and we’ll look at the possible treatments for reducing the rate of hair loss in the next chapter.
Why then do we go bald? Why do we lose more hair than we grow?

**Causes of hair loss**

The medical term for hair loss is alopecia. There are several causes of hair loss, though the most likely cause for any man losing his hair is the genetic male pattern baldness (MPB) and the root cause behind MPB is your level of DHT (Dihydrotestosterone). Sooo many three letter acronyms! Women can also lose their hair through female pattern baldness but it is usually a very different pattern to men. Before we go into detail about MPB and DHT, we’ll briefly look at the other possible causes for thinning hair.

**Defective hair shaft**

There’s a whole multitude of conditions where a defective hair shaft will cause loss of hair. In many cases it will be because the fibre has not been properly formed inside the follicles thus resulting in hair shaft defects. Poor hair care and grooming can lead to hair shaft defects but you have to be pretty mean to your hair to cause problems through grooming.

Hair shaft defects may be the result of loose anagen syndrome which means the hair is loose in the hair shaft and is easily pulled out. You will notice this in babies who are born with a head full of hair but lose it shortly after. When an infant lies on its back for long periods of time, you will notice the hair on the back of the head becomes very thin. Most babies will outgrow this condition as they become toddlers.

People with blonde hair tend to have more hair shaft defects than those with darker coloured hair. Often it is considered to be hereditary because it tends to run in families. Fortunately the problem will usually get better with age and the hair shaft will become stronger.
Traction alopecia is also associated with hair shaft defects. This is usually caused by wearing tight hairstyles such as braided corn rows or ponytails which are pulled very tight. This is a condition that is easily corrected by letting the hair hang loose but if the hair has constant strain on it there will be damage to the hair shaft over time. If the condition is allowed to continue long enough, it will cause permanent hair shaft defects that will never grow hair. (This can be a problem where your religious beliefs dictate that you wear a turban all the time or braid your hair and beard permanently).

Trichotillomania is condition where an individual pulls on their hair and plucks it out in spots. This will leave bald patches on the head and, if left untreated, can cause a defective hair shaft that will no longer be able to grow hair. This condition is usually a psychological issue that needs professional assistance to address the underlying cause of the behaviour.

Some people will cause hair shaft defects by over-processing their hair with perm solution or hair dyes. Generally if the perming and dying is performed by a professional hairdresser, this is not an issue.

**Illness**

Since the follicle is a very sensitive, it does respond to imbalances in the body. Most hair loss caused by disease or illness is temporary and resolves itself after the body has returned to a normal healthy condition. It can happen that one to three months after a high fever, severe infection or flu, a person may experience hair loss; this is usually temporary and corrects itself.

**Thyroid problems**

Both an overactive thyroid and an underactive thyroid can cause hair loss. Hair loss associated with thyroid disease can be reversed with proper treatment.
**Deficient diet**
Some people who go on low protein diets, or have severely abnormal eating habits, may develop protein malnutrition. To help save protein, the body shifts growing hair into the resting phase. If this happens, massive amounts of hair shedding can occur two to three months later. This condition can be reversed and prevented by eating the proper amount of protein.

**Medications**
Some prescription drugs may cause temporary hair shedding in a small percentage of people. Examples of such drugs include some of the medicines used for the following: gout, arthritis, depression, heart problems, high blood pressure, or blood thinning. High doses of vitamin A may also cause hair shedding.

**Cancer treatments**
Chemotherapy and radiation treatment will cause hair loss because it stops hair cells from dividing. Hairs become thin and break off as they exit the scalp. This occurs one to three weeks after the treatment. Patients can lose up to 90 per cent of their scalp hair. The hair will grow back after treatment ends.

**Iron deficiency**
Iron deficiency occasionally produces hair loss. Some people don’t have enough iron in their diets or may not fully absorb iron in their diets. Women who have heavy menstrual periods may develop iron deficiency. Low iron can be detected by laboratory tests and can be corrected by taking iron pills.

**Major surgery/chronic illness**
Anyone who has a major operation, which can be a tremendous shock to the system, may notice increased hair shedding from one to three months.
afterwards. The condition reverses itself within a few months but people who have a severe chronic illness may shed hair indefinitely.

**Alopecia Areata**
This type of hair loss is believed to be caused by the immune system reacting to hair follicles as if they were antibodies and shutting them down. The hair loss is usually limited to a small area, leaving a totally smooth round patch. In a rarer, more severe condition called Alopecia Totalis, all hair on the entire body is lost, including the eyelashes. Treatments include topical medications, a special kind of light treatment or in some cases drugs.

**Fungus Infection (Ringworm) of the scalp**
Caused by a fungus infection, ringworm begins with small patches of scaling that can spread and result in broken hair, redness, swelling and even oozing. This contagious disease is most common in children and oral medication will cure it.

**Stress**
Stress can cause hair loss is some people. Usually it occurs around three months after the stressful event has occurred and it may take some months after the stress period has ended for the hair growth to resume. In most cases it is temporary. If the person is predisposed to genetic or Androgenic Alopecia (another name for male pattern baldness) then the stress may trigger the onset of genetic hair loss or may worsen existing hair loss.

**Sebum**
Sebum is produced by the sebaceous glands in the skin; as we saw earlier in this chapter, it is an oily substance that is used to moisturise the skin, preventing it from drying out and thus keeping hair and skin conditioned and healthy. It also
helps prevent the build-up of certain bacteria. Basically sebum is vital for healthy hair and skin.

However, too much sebum is not good. If excess sebum is not washed out by shampooing, it can build up in the follicle. Eventually it makes its way to the top of the scalp and oxidises with the air. This causes the sebum to harden and bacteria will thrive off this hardened sebum, damaging the hair follicle. Eventually the blockage stops nutrients getting into the follicle, making it practically impossible for hair to grow. This is called seborrheic alopecia, not to be confused with alopecia due to seborrheic dermatitis (an inflammation of the skin causing red itchy and flaky patches to occur).

Sebum can also cause high levels of the male hormone dihydrotestosterone (DHT) to occur and, as we are about to see, DHT is very strongly linked with male baldness. It follows if you can keep sebum at healthy levels then your hair will have a much better chance.

The main thing to note is that many things can cause temporary hair loss and it will usually grow back once a particular problem is dealt with. Male pattern baldness however is not temporary; it is permanent, especially if not detected early and left unchecked.

So let’s investigate male pattern baldness (MPB), and the DHT that causes it.

**MBP and DHT**

DHT is Dihydrotestosterone. It is produced by metabolism of the hormone testosterone and is formed in the adrenal gland, hair follicles, prostate glands and testes. DHT is a naturally occurring hormone, all men have it, but in genetically predisposed men it can cause MPB. We need DHT for the formation of the male specific characteristics such as development of the body hair,
development of the facial hair, depth of voice, etc. However, after puberty an abundance of DHT is no longer needed. For most men an excess of DHT causes no problem. If, however, you are genetically predisposed to MPB, then it does.

The current theory is that DHT binds to the hair follicles and then enters cells preventing ribonucleic acid (RNA) polymerase from functioning. RNA is key to protein synthesis. In plain English, this means if hair cells cannot create protein then hair will not grow and eventually will die.

DHT occurs as the result of a metabolic process where an enzyme called 5-alpha-reductase (5AR) converts testosterone into DHT. Basically: Testosterone in hair follicles + 5AR = DHT = bad news! Studies confirm that men showing signs of baldness have increased activity of 5AR in their scalps. And an excess of sebum in the scalp can encourage the production of 5AR, which is why keeping sebum levels under control is vital. It follows therefore that if we can stop 5AR from working, we can reduce DHT levels and prevent MPB from developing.

There are some contentious issues here as there are two types of 5AR, Type I and Type II. Nobody is 100 per cent sure exactly how much each enzyme contributes to the DHT production that leads to baldness. The Type I enzyme is commonly found in the glands in the skin in close proximity to hair follicles, Type II is found in the dermal papillae of hair follicles and both types are found in other places around the body too.

There are products - DHT Blockers – which can inhibit production of DHT and hence reduce its capacity to damage the hair follicle. There are many topical DHT blockers and inhibitors that are easily available on the open market under different brand names, being manufactured and marketed by different companies. We will look at these in detail in the next chapter.
Drugs to block 5AR have been available for a while. Finasteride (sold as Propecia) blocks the type II 5AR reducing DHT levels by up to 60-70 per cent. This has seen about one in three users grow new hair on the crown of their heads. A Type I 5AR blocker was tested and the results showed there was no hair re-growth in the patients who undertook the trial. It seems that the Type II enzyme which is located in the hair follicle is the main culprit. Another drug called Dutasteride (sold as Avodart) blocks both Type I and II. This drug was developed for men suffering with an enlarged prostate which is also caused by excess DHT.

So it’s simple, take a load of DHT blockers and Bob’s your Uncle, right? Not quite – you should be aware that the full functions of DHT are not completely understood, for example deficiency in DHT has been linked with a risk of Alzheimer’s disease and it plays important roles in the development of male characteristics such as muscle growth and keeping other hormones such as oestrogen in check. The long term implications of blocking DHT are not fully known. Another significant factor to consider is that once you start taking the drugs you will more than likely need to take them for the rest of your life if you want to keep your hair, which is far from ideal.

There is much to think about before you rush off and purchase one of the DHT blockers. And before you start taking any drug at all, you need to understand Male Pattern Baldness and its measurement, the Norwood Scale, because the extent of your MPB will determine the combination of treatments that will work best for you. I’ll explain why as we go along.
Male Pattern Baldness and the Norwood Scale

Male pattern baldness (MPB) is the common type of hair loss that develops in most men at some stage. The condition is also called androgenetic alopecia. It is called male pattern balding because there is a pattern to it that just about all men who go bald will experience. At first the hair begins to recede at the front. At the same time, the hair usually becomes thin on the top of the head. A bald patch gradually develops in the middle of the scalp. The receding front and the bald patch on the top gradually enlarge and join together. Some men will go bald in less than five years, for others it takes a lifetime, or they may not go completely bald at all.

Nearly all men have some baldness by the time they are in their 60s. However, the age at which the hair loss starts is variable. About three in ten 30-year-olds, and half of 50-year-olds are quite bald. Some women also develop a similar type of hair loss, mainly at the crown. Baldness in women is much more common after the menopause.

Two-thirds of all men will eventually be affected by male pattern baldness – in the UK, this means that 7.4 million men are losing their hair at any one time.

The highest rates of hair loss are found among Caucasians, followed by Afro-Caribbean men; Chinese and Japanese men have the lowest rates. MPB doesn’t occur among Native Americans but no-one has yet discovered why.

Male pattern baldness runs in the family. If your grandfather, father or brothers went bald early, the chances are that you will too. The strongest influence is on the mother’s side: if your maternal grandfather went bald (as mine did), that's
probably a better indicator that you will too than if your father's father lost his hair. However it is a genetic lottery! Some families have no recent history of hair loss and yet you will experience it. In other families, most of the males are bald and yet you may still have a full head of hair. The onset of hair loss varies from one individual to another and is influenced by genetic expression, the levels of testosterone and DHT in the bloodstream and age.

The likelihood is that if you are reading this, you’ll be experiencing male pattern baldness. So it is less a question of what is your risk of getting MPB and more a question of what stage are you at and what can you do about it?

**Understanding the cycle of hair loss**

Hair loss doesn’t occur all at once but is cyclical. People who are losing their hair experience alternating periods of slow hair loss and rapid hair loss, and even periods when hair loss stabilises. The factors that cause the rate of loss to speed up or slow down are unknown.

The majority of men who have extensive balding will have developed most of it by the age of 30. Twenty-five per cent of men will show clinical balding by age 30 and half of the male population will show some degree of clinical balding by age 45 to 50. The process seems to slow down as men approach 60 to 65. As this is a genetic process, it is probable that the men who bald later in life rather than earlier also have a form of genetic hair loss.

Men who start the balding process well into their 30s and 40s typically don’t lose their hair as quickly or as completely as men who start balding in their early 20s. About seven per cent of men who are balding develop the most complete form of balding (called the Class 7 pattern; see Norwood classification diagram), in which only the wreath of hair exists around the head.
Those men with Class 7 balding patterns usually show those patterns before they reach 30 years old. This wreath of hair is permanent hair in most men and measures about $2\frac{1}{2}$ inches in the mid-back of the head when the balding process reaches completion. Most men who lose their hair don’t lose all of it nor do they progress as far as this Class 7 pattern.

The Norwood Classification System

Male pattern baldness is measured by degrees using the Norwood classification system. The system was devised by Dr O’Tar Norwood in the 1970s. It’s rather old now and many more patterns have been identified but Norwood is still the industry standard. It provides two classification systems, one for regular male pattern thinning and one for Type A pattern thinning.

The diagram shows the Norwood classification system for both types of male pattern thinning. Under the regular classifications, hair loss is divided into seven patterns. The numbers with an A next to them denote the Type A pattern. Type A is usually a frontal hair recession which keeps advancing backwards in one
single area of balding. The eventual extent of balding tends to be more limited than in the regular pattern of male thinning.

The majority of men with pattern thinning follow the regular pattern, with hair loss starting in the front and progressing slowly (front and back) in two different areas (Class 4 and 5). On rare occasions, a man may just bald in the crown with minimal frontal balding (Class 3 V). Over time, the frontal and crown areas enlarge and merge, and the entire front, top, and crown of the head may become bald (Class 6 or 7).

Baldness in some men progresses such that they fall somewhere between the different stages; in other men, hair loss comes to a halt and they remain in one stage without progressing to the next. It’s believed that advanced balding (defined as a Norwood Class 5, 6, or 7 pattern) occurs in about 35 per cent of balding men.

In 95 per cent of men, the $\frac{1}{2}$ inch of hair on the front of the forehead is lost in the younger years and the hairline recedes into a mature male hairline (somewhere between a Class 2 or 3 pattern) with a characteristic convex V-shape. This change from the concave juvenile hairline (also a typical female pattern hairline) to the convex mature male hairline is common and not necessarily a sign of oncoming baldness.

Understanding how far advanced your balding pattern is can be crucial to which treatments are likely to work and whether restoration is an option. The more advanced you are in the hair loss department, the fewer options you have. Some treatments will be ideal and some won’t. We’ll explore this in the next two chapters, where we look at what you can do to slow down the process and ways to conceal your hair loss. And when it comes to considering a hair transplant, there are many more factors to consider, which I’ll tell you about later in the
book when we get on to the surgical route and look at whether it is appropriate for you.

Just before we do, let’s nail some myths that get bandied about and really do not help our situation! Plus we’ll take a look at grey hair and why that is significant.

**Myths and facts around hair loss**

*Myth: MPB is only inherited from your mother's side of the family*

Fact: The gene for male pattern baldness can come from your mother's or your father's gene pool; baldness can be inherited from either side of the family.

*Myth: Losing an average of 100 hairs per day is nothing to worry about because it's normal.*

Fact: If you don't have male pattern baldness, that's true, because the hairs that fall out will soon be replaced by new hairs. If you do have male pattern baldness, however, even losing the ‘normal’ 100 hairs a day can be a concern because many of those hairs are being shed by follicles that are in the process of dying; therefore the new hairs those follicles make will be progressively thinner until the follicles are only capable of making fine, vellus hairs. Eventually those follicles will die and no longer produce any hairs at all.

*Myth: You can increase the number of hair follicles by drugs, natural or chemical treatments, massage, diet, or other means.*

Fact: No. The number and diameter of your hair follicles is completely out of your control - it's hereditary. Nothing you do will alter how many hair follicles you have. But you can use preventive and treatment measures to combat the follicle-killing effects of DHT.
Myth: Cutting your hair can make it grow back faster and thicker
Fact: No. Hair grows at an average rate of ½ inch per month. Because each hair shaft is slightly thicker at its base compared to its tip, hair can temporarily appear thicker for about a week after it has been significantly cut. But cutting hair has absolutely no effect on each strand's thickness or on the number of hairs that will sprout follicles.

Myth: If left uncut, my hair will just keep growing and growing.
Fact: No. Length depends on your hair's natural cycle, which is unique to you. The longer the hair's growth phase, the longer the hair will grow. If you have a naturally long growth phase, you can grow your hair well below your waist. If you have a naturally shorter growth phase, your hair will be shed before it grows that long and only grow to a certain length.

Myth: Wearing a hat causes hair loss
Fact: As long as you don't regularly wear a hat that's so tight it restricts circulation blood flow to the hair follicles - this will not cause hair loss.

Myth: Blow-drying can cause hair loss
Fact: No. But it can dry, burn and damage hair that may then fall out, to be replaced by new hair that will sprout from the follicle beneath the skin during the growth phase.

Myth: Magnets increase hair growth
Fact. No. In the early days of electricity, magnetic devices were commonly sold in local newspapers as a cure for hair loss. Magnetic therapy presupposes that
magnetic fields can yield health benefits by improving blood flow. However, increasing blood flow to the scalp doesn’t prevent hair loss or regenerate hair.

*Myth: Brushing your hair is better than combing*
Fact: When you tug and pull a comb or brush through the tangles and knots in your hair, you may pull out a few hairs but they’ll grow back, because brushing and combing healthy hair doesn’t disturb the hair follicles below the skin surface. However, hair that has already started the miniaturization process is more susceptible to loss from any kind of rough treatment, whether with a comb or a brush.

*Myth: Cutting or shaving you hair will make it grow back thicker*
Fact: No, getting frequent haircuts doesn’t make your hair grow more thickly. Now we know how hair grows, it’s pretty obvious that cutting your hair has no effect on the thickness of the hair shaft. It might feel thicker when shorter because it feels more dense, but it is an illusion.

*Myth: Hair loss is caused by clogged pores*
Fact: Clogged pores left unattended may damage the follicle over time and that might lead to some loss of follicles. However, clogged pores are not responsible for male pattern baldness and anyone who tells you otherwise is about to rip you off. Some unscrupulous people build huge businesses around massaging hair and ‘treating’ the clogged hair follicles to allow the hair to come through the skin. Avoid them!
Myth: Frequent washing causes hair loss
Fact: No. Shampoo and frequent washing have nothing to do with baldness. This is just another way of trying to deny the truth. MPB isn’t caused by hair falling out but by normal hair gradually being replaced by finer, thinner hair. However, when you are clutching at straws you’ll blame anything. When you notice your hair starting to thin, you pay more attention to shed hair in the bathtub or shower and decide to shampoo less often to keep from losing hair. As a result, hair that would normally come out in the bath or shower builds up and is not shed normally. With the next shampoo, you see even more hair loss, confirming your original suspicion that shampooing causes baldness.

Grey Hair
Grey or white hair is not actually a true grey or white colour. It is in fact the lack of pigmentation in the hair that makes it appear grey or white because of the way light reflects from the hairs. Typically our hair loses its pigmentation as we age.

The Journal of Investigative Dermatology published a study in 2005 which found that Caucasians will begin to grey in their mid-30s and Asians begin greying in their late 30s, but most Afro-Caribbeans can retain their original hair colour until their mid-40s. The age at which greying begins seems almost entirely due to genetics. Sometimes people are born with grey hair because they inherit the trait.

The change in hair colour occurs when melanin ceases to be produced in the hair root and new hairs grow in without pigment. The stem cells at the base of hair follicles produce melanocytes – cells that produce and store pigment in hair and skin. The death of the melanocyte stem cells causes the onset of greying.
In some cases, grey hair may be caused by thyroid deficiencies or a deficiency of vitamin B12. It can also be caused by Vitiligo (a condition in which the skin loses melanocytes, resulting in very light patches of skin and premature grey hair) and by early onset of menopause in women.

You might be a bit concerned about going grey as well as bald but grey hair can be the friend of hair loss. The main reason why thinning hair looks thin, as we will discover in more detail in the next chapter, is the contrast between hair colour and the scalp. The darker the hair, the more contrast with the scalp. Clearly grey hair has less contrast and so can look thicker than it actually is. When it comes to hair transplantation, this can also be a distinct advantage because you may need fewer grafts to achieve the illusion of thicker hair.

Bonus!

Before we get on to the surgical options, let’s take a look now at what you can do to stem the flow of hair loss and create the illusion of thicker hair with treatments and concealers.

Information sources – for full references see Appendix 1:
Hair Loss and Replacement for Dummies (book); American Hair Loss Association; International Alliance of Hair Restoration Surgeons; Stop Hair Loss Now (forum)
Now that we have a better understanding of how and why hair loss happens, this chapter is all about the non-surgical options we have for doing something about it. These options should always be considered, explored and made the most of before the surgical route is taken—because once you decide on surgery there is no going back and you have to follow through.

Now there are a multitude of vendors out there all preying on your vulnerability and promising any number of miracle cures for your thinning hair. This is a ruthless, brutal multi-million pound industry. It has a vested interest in keeping you in the dark, misinformed, vulnerable and desperate. I have been a victim of it but I want you to be a victor.

I will only recommend products and processes that I have used myself and know work. Where I have not used a product but I believe it to be good, I will flag up places where you can do your own research to find out whether it is right for you. If a product or process that you have come across is not mentioned in this book, it is because I do not recommend its use. I can’t specify products that I think are junk but their omission says it all!

This chapter ‘Stemming the Flow’ is about controlling the levels of DHT in your scalp. The following chapter is about hiding the truth and using concealers. For obvious reasons I’m going to talk about stemming the flow first, although it wasn’t the first route I took in my journey. I spent two to three years using concealers and trying other methods before I got onto Propecia. Trying the medications should be the first step for you though, because controlling the cause of hair loss will give you the greatest long term benefit and may help you avoid some of the other routes to concealing your thinning hair.
The BIG 3 to beat DHT!

**Finasteride, Minoxidil and Nizoral**

We know from reading the last chapter that the main known factor that causes hair loss is DHT (Dihydrotestosterone). To form DHT your body uses 5α-reductase enzyme to convert free roaming testosterone inside the hair cell follicle. The DHT then binds to the hair cell receptor and causes it to atrophy or shrink, creating the miniaturization of the hair (from a strong terminal hair to a soft vellus hair). Eventually your hair follicle stops producing hair and you lose that follicle.

There are two types of the 5AR enzyme: Type I and Type II. Type II 5AR seems to be the main culprit in MPB as the Type II enzyme is present in the hair follicles. The drug ‘Finasteride’ is a specific inhibitor of Type II 5AR that reduces DHT by 85-90 per cent and reduces the overall DHT blood serum levels by 65 per cent. So Finasteride (which is marketed under the brand name ‘Propecia’) is extremely useful as a treatment for MPB as it directly attacks the problem.

Nizoral shampoo is thought to help dull the androgen receptors in the scalp which the DHT binds to. Together they provide a synergetic effect.

Minoxidil is a hair stimulant. It is the only FDA-proven hair stimulant on the market. However, stimulating hair and protecting hair from further damage are two separate actions. Minoxidil will artificially augment your hair while you use it but it does NOT have any known effect on 5AR or the androgen receptors in the scalp. It is available in a number of forms but the best available now is Rogaine foam.

The best way to attack male pattern baldness is to:
1. Stop further damage to your hair via DHT. You can accomplish this best by using Finasteride (Propecia) to inhibit the 5AR enzyme and Nizoral to dull the androgen receptors.

2. If further thickening/re-growth is needed after the DHT is reduced, then Minoxidil can be used to further augment your existing hairs and perhaps even stimulate some dormant hair follicles to resume growing.

Use all these 3 products together -
1. Finasteride (Propecia) 1mg per day
2. Minoxidil - Rogaine foam topically applied
3. Nizoral shampoo once /twice a week but no more – it will dry out your scalp!

**Propecia**

Propecia (Finasteride) is the best proven way to prevent further loss. 1mg per day is the recommended dose. There is also a cheaper (but just as good) brand on the market called Proscar. Proscar is exactly the same as Propecia but it comes in 5mg tablets so each tablet needs dividing into five to give you your 1mg per day. Using Proscar will certainly save you a heap of money! However so will taking the 1mg generic ‘Finpecia’ tablet, which I now take.

‘Finpecia’ is EXACTLY the same as Propecia; it’s completely legitimate, saves cutting Proscar into fifths and I have only heard great reports on it. I have been on it six months now with no change to my hair at all.

I get lots of emails from people wanting to start Propecia / Proscar. I can easily put you directly in touch with very reliable sources who can prescribe these safely, quickly and at an affordable price. You will need a prescription for all of these drugs.

This is a very reliable legitimate online source: [www.ukfinasteride.info](http://www.ukfinasteride.info)
It is a secure website, easy to use, discreet, quick, safe and completely legitimate unlike many others online sources.

There is also more good information about Propecia/Finasteride on my website www.spexhair.com, along with charts that show the efficacy of the drug in long-term controlled studies.

Some facts from a five-year clinical study of Propecia:

- Nine out of 10 men who took Propecia had visible results; either re-growth of hair (48 per cent [134 of 279]) or no further hair loss (42 per cent [117 of 279]), vs 25 per cent [4 of 16] who took a placebo (sugar pill), according to an assessment of photographs by an independent panel of dermatologists.
- Two out of three men who took Propecia re-grew hair, as measured by hair count. All of the men in the study who were not taking Propecia lost hair.
- A majority of men who took Propecia were rated as improved by doctors; 77 per cent (210 of 271) vs 15 per cent (2 of 13) of men who took a placebo.

A majority of men who took Propecia reported that their bald spot got smaller, their hair loss slowed down, and the appearance of their hair improved. It has certainly been my experience that Propecia has slowed down the rate of my hair loss. In fact I don’t think I would have the results I have today if I had not started taking it when I did. It has, without a doubt, been the best thing I have done to help address my hair issue.

The following diagram is a pretty good representation of the MPB process and its reversal with Propecia.
Limitations and side effects of Propecia/Proscar

Propecia was developed to treat mild to moderate male pattern hair loss on the top of head and middle front of head in men only. Propecia has not been proven to restore hair in the frontal areas. Propecia generally only works in stimulating re-growth of thinning hair in the crown area of the scalp, though why this is the case is not fully understood. Only hair transplant surgery has been successful in restoring hair in the frontal hairline area once it has been lost.

Propecia is also less effective in growing hair in older men. It works best for men who have been balding for less than five years. Propecia can work over the long term only if you continue taking it. If you stop taking it, you will likely lose any hair you have gained within 12 months of stopping treatment.

Women who are or may potentially be pregnant must not use Propecia and should not handle crushed or broken Propecia tablets because the active
ingredient may cause abnormalities of a male baby’s sex organs. If a woman who is pregnant comes into contact with the active ingredient in Propecia, a doctor should be consulted. Propecia tablets are coated and will prevent contact with the active ingredient during normal handling, provided that the tablets are not broken or crushed. You should be particularly mindful of this if you use Proscar, where you are cutting the tablets, if you have a pregnant wife/girlfriend/partner.

**When to expect results**

You will need to take Propecia for as long as you want to grow or maintain your hair. It’s important to stick with Propecia for at least 12 months to judge how well it’s working for you.

![Timeline for Results](Source: www.propecia.com)

**What are the side effects?**

Side effects from Propecia at the standard 1 mg daily dose are rare and fortunately, if they do occur, they’re not permanent. However it is important that you are aware that side effects can happen and know what they are.
In a study of men taking Propecia 1 mg, around two to four per cent experienced some form of sexual dysfunction (decreased libido, erectile dysfunction, or decreased volume of ejaculate) compared to just over two per cent of men treated with a placebo. For those men who reported cases of sexual dysfunction soon after starting the medication, it generally appeared within months. A small number of men saw a change in their libido or sexual function months or years into taking the drug.

You’ll be happy to know that the sexual side effects were reversed in all men who discontinued therapy (and in 58 per cent of those who continued treatment, the sexual side effects returned to their normal premedication levels). After the medication was stopped, all sexual side effects generally disappeared within a few weeks.

If you experience negative sexual side effects, you should consult your doctor about stopping the medication until the side effects go away and then restarting at a lower dose (either a quarter or half of a 1 mg pill a day). If you have no side effects after several weeks on the lower dose, you can work back up to the 1 mg per day dose. Even staying on a lower dose will offer some benefit but if side effects occur at the lower dose, you may need to stop taking it altogether.

Another rare side effect to be aware of is breast tenderness or breast enlargement (in males this is called gynecomastia). This occurred in 0.4 per cent of men on Propecia 1 mg but was no greater than in the control group. In men who developed gynecomastia, the appearance of breast cancer was slightly higher than in the control group, although this connection may not be statistically significant.

Other side effects that were no more common than those experienced in patients taking a placebo included rash, itching, hives, swelling of the lips and face and testicular pain. Some rare cases of mood changes have also been reported. At
present there have been no reported contra-indications of taking Propecia 1 mg with any other drugs.

If your doctor prescribes Propecia to treat your hair loss, it’s best to take the recommended dose of 1 mg per day as long as you have no side effects. Lower doses have been shown to be effective, but less so. There’s also little evidence that a higher dose helps, although some doctors may increase the dose under certain circumstances.

Understanding potential side effects is important, even if they are rare. You will be taking Propecia/Proscar for the rest of your life, even if you’ve had hair restoration surgery, because the DHT will still be produced and will still attack your follicles. I still take my 1mg per day and will do forever.

**Dutasteride/Avodart**

If for some reason you do not respond to Propecia, there is the other drug I referred to in the last chapter called Dutasteride (marketed as Avodart) but you should only try this if you have absolutely no response from Propecia after 12 months and after proper consultation with your doctor. It is also not yet FDA-approved as a treatment for hair loss.

The manufacturer of Avodart, GlaxoSmithKline, completed a Phase I and II study of Dutasteride for hair loss but suddenly and unexpectedly called off the trials in 2002. However, these trials were restarted in Korea in 2006 and were completed in January 2009. We await the results of this study. Side-effects on Dutasteride include erectile dysfunction, decrease in sex drive, difficulty in ejaculating and breast tenderness or enlargement. There is also some speculation that it can *cause* hair loss in some men.
So for many reasons, jumping on the Dutasteride bandwagon before the Propecia bandwagon is not a good idea. For most men Propecia is enough to halt and even reverse MPB. On the off-chance your body becomes tolerant of Propecia (over the years) you always have Dutasteride to fall back on.

Keep in mind that DHT is not an evil androgen that just causes hair loss. Various bodily functions benefit from DHT. Propecia inhibits 65 per cent overall DHT levels leaving 35 per cent for your body to use (most of that 35 per cent is from the type I 5AR that isn’t a big factor in hair loss). Dutasteride inhibits 90 per cent or more overall DHT levels leaving 10 per cent or less for your body, and that may cause other issues. Basically, my opinion is use Propecia first and only resort to Dutasteride if you have no other option.

**Minoxidil/Rogaine**

The first FDA-approved medication for the treatment of hair loss was topical Minoxidil, also known by the brand name Rogaine. Rogaine is a solution that’s applied directly to the scalp. Originally available only with a doctor’s prescription, it’s now available over-the-counter as both Rogaine and generic Minoxidil solution. It comes in concentrations of five per cent for men and two per cent for women. Recently, Rogaine developed a new Minoxidil formulation in a five per cent topical foam. This product is less greasy and easier to apply for some people.

Before Minoxidil was available topically, it was an oral blood pressure medication. Doctors observed that many people taking oral Minoxidil not only had a decrease in blood pressure but began growing body hair as well. Researchers developed a topical formulation to see if it could cause scalp hair to grow without the side effects of the oral medication. Studies showed modest hair growth.
Just how Minoxidil works in hair growth is not fully known. It may increase the flow of blood to the hair follicle but how this relates to hair loss is unclear. However, Minoxidil increases the duration of the hair follicle growth cycle and improves the quality of the hair by increasing the diameter and length of fine, miniaturized hair.

The original studies on Minoxidil were performed on the crown of the head, so there’s a misconception that it only works in this area. It also works to a lesser degree in other areas as long as there’s some fine (miniaturized) hair. However, it doesn’t work if the area is totally bald.

The greatest benefit from Minoxidil is visible between six months to two years from the beginning of treatment. After this time, you see a gradual decrease in effectiveness, so you’ll continue to lose hair but at a slower rate than if you weren’t using the product.

The effectiveness of Minoxidil to treat men with pattern hair loss has been investigated since the mid-1980s and is well established. Even though both five per cent and two per cent solutions have been shown to decrease hair loss and increase hair, the five per cent solution seems to work better for men.

If you stop using Minoxidil, the effects wear off within three months and the previous pattern of hair loss resumes. When you restart it, you generally don’t regain the hair that was lost, so it’s best not to stop and start the mediation but rather to use it regularly.

Doctors recommend that you apply Minoxidil directly to the scalp (not the hair) twice a day, although once a day application, particularly of the foam, seems to be just as effective. In order to regain lost hair, you need to apply the solution or foam to all thinning areas, including the frontal hairline and temples.
There has been a number of studies comparing Minoxidil to Finasteride (Propecia), which have found Finasteride to be superior in reducing hair loss. There are also studies which have found that using the two together is superior to using Finasteride alone. I have used, and still do use, both together. There appear to be no greater side effects from doing so, and there are no contraindications to using the two in tandem, so I recommend the belt and braces approach. Use both!

You don’t need a prescription for Minoxidil (Rogaine) and you can generally buy it over the counter. Here in the UK you can buy at Boots; however it is very expensive! The foam, which is proving to be more effective and much easier to apply, cannot yet be obtained here in the UK. You can get it from reliable sources by mail order; there are links on www.spexhair.com to the best suppliers. I have heard positive feedback regarding the foam and my own experience is very positive too. I apply it just at night and it does make my hair feel thicker and more manageable the following day. I have also not heard of nor experienced any increased loss or shedding using the foam. Shedding is something you need to be aware of though (see Shedding on medications later in the chapter).

*There is more information on the specific products and suppliers on* [www.spexhair.com](http://www.spexhair.com)

*Side effects of Minoxidil*

By far the most common side effect of topical Minoxidil is local irritation, although the foam formulation is much less irritating than the original version. Women seem to be affected more than men, so only the two per cent solution is licensed for women’s use.
Shedding on medications

It’s possible and quite common for you to shed hair when you start a new treatment. You need to remember that shedding is part of the natural cycle of hair growth. The shed hair is not lost, it is merely the follicle in resting phase. It does not mean that the treatment isn’t working! It’s more often a sign that it is. If you start a new treatment like Minoxidil/Rogaine or Propecia, you probably will shed but the amount of hair shed varies from person to person.

A study in Germany proved that there was a quantifiable increase in shedding and a corresponding loss of hair density in the first three months of Minoxidil use. However, by the six month stage the subjects were shown to have regrown the lost hair and had increased hair density compared to that recorded at the start of treatment. By 12 months after starting on Minoxidil, their hair density was much improved and the diameter of the hair fibres was thicker than at the start of treatment and as compared to controls who did not receive treatment.

So it happens, and you have no need worry about it. There is more information about shedding on meds on www.spexhair.com, if you feel you need to know more about how and why it happens. I’ll just reiterate – nine times out of 10, a shed will happen and the hair will grow back stronger as it goes through its growth cycle. The shedding helps push out weaker hair, leaving stronger hair to grow.

Nizoral – the third element of the Big 3

Nizoral is an anti-fungal shampoo that kills the fungi that cause seborrhea and dandruff. When used regularly, it is a very useful alopecia treatment. There are a number of theories as to why this might be but none is conclusive. We just know it works!
Nizoral contains a chemical called ketoconazole, which inhibits the binding of androgens to receptors in the body and this would include the binding of DHT to hair-follicle receptors.

It is also believed that Nizoral’s anti-alopecia effect may be due to its activity upon sebum – the fatty substance that accumulates in the scalp around the hair follicles. It is known that Nizoral can remove and reduce sebum deposits and, as we read in the last chapter, excess sebum can also stimulate production of DHT.

Positive results with Nizoral shampoo are often noted within a few weeks, whereas a pure anti-DHT affect may take a few months. You should only use Nizoral a couple of times a week maximum though, otherwise it can strip your scalp of all its sebum and you do need some!

You may also experience shedding on Nizoral if you over-use it. It makes your hair feel great and also look fuller. The risk you run is over-applying it due to this and in turn causing a drastic shed in some cases. You should take extra care in using Nizoral after a hair transplant for this reason. The sheds will pass and the hair will all come back over time so there is nothing long-term to worry about but this is often the reason why guys who feel they were gaining momentum with their HT suddenly hit a wall of disappointment.

So there you have it. The best form of defence for your hair loss is to attack it with the BIG 3: Proscar/Propecia, Nizoral and Minoxidil/Rogaine. The sooner you start on this regime, the quicker you will be able to stem the flow. It has to be said though that these products have no effect on areas where you are already bald. In fact nothing can bring back natural hair to a completely bald patch, so act sooner rather than later to preserve the hair you have. There also alternative treatments coming on all the time.
Other alternative treatments

Although the Big 3 are the most common in usage and their efficacy is proven, there are other products available such as Revivogen and Spironolactone.

There are three main hair care products under the Revivogen brand, which they recommend you use together. Revivogen Scalp Therapy is a topical lotion designed to inhibit the production of DHT and sustain the growth phase of the existing hair follicles. Revivogen Bio-Cleansing Shampoo is a complementary product to the therapy lotion. It helps to ensure that the scalp is clean, well-nourished and in good condition, reducing sebum (natural scalp oil) and adding extra nutrients to help the hair stay strong. Revivogen Hair Thickening Conditioner is designed to reinvigorate thinning hair by moisturising the hair shaft with natural proteins, giving the hair more volume.

Topical Spironolactone is a topically applied lotion or cream that works as an incredibly potent androgen blocker. Whereas Propecia inhibits the creation of DHT, Topical Spironolactone also blocks DHT from binding to receptors and damaging your follicles. You can use it in combination with Propecia.

More information and suppliers for these products is on www.spexhair.com

There is also a treatment known as Platelet Rich Plasma (PRP). PRP has been used in surgery, particularly for sports injuries and burns, for quite some time for speeding up the wound healing process. PRP is drawn from your own blood via a centrifugal process and then injected back into the wound. Because the PRP contains your own growth hormone, there is some evidence that it can help stimulate the growth hormones in your hair follicles. It is not yet widely used, but it is worth investigating, particularly if you have problems with using the other treatments. Keep checking my website for updates on this.
Nutritional Supplements

Natural and nutritional supplements are also much in vogue for stemming the flow of hair loss. There is much speculation about whether Green Tea or White Tea can help in the hair loss scenario (and which is most effective), and whether or not we should be taking zinc supplements. My belief is that to maintain healthy hair and a healthy body and mind, we need a balanced diet with the recommended daily amounts of vitamins and minerals. And while it is known that both too little and too much zinc can be contributory factor in hair loss, the plain fact is that MPB is caused by excess DHT in the hair follicles of genetically pre-disposed men. Vitamin and mineral deficiencies will not help matters but can’t be directly blamed in most circumstances.

My advice would be make sure you are getting a good balanced diet, a good multi-vitamin supplement and are taking care of your health generally. Drink Green Tea because it has general health benefits anyway. Then treat your hair loss with the remedies that are proven to work. There are two supplements that I would recommend adding to your daily multi-vitamin and mineral.

MSM

I take MSM because some of its essential functions include maintaining the structure of the proteins in the body, helping the formation of keratin which is essential for hair and nail growth and aiding in the production of immunoglobulin which maintains the immune system.

MSM is particularly helpful post-op if you go down the surgery route because it can help in the inhibition of pain impulses along nerve fibres (analgesia), reduction of inflammation, an increase in blood supply, reduction of muscle spasm and softening of scar tissue.
**Saw Palmetto**

I also take a Saw Palmetto supplement. Research has shown that this herb has the same effects as Finasteride in treating patients with benign prostate enlargement. Saw Palmetto inhibits the conversion of testosterone to DHT. It also is believed to limit production of oestrogen and progesterone which are associated with DHT.

Since both hair loss and prostatic disease are related to DHT, many suggest that Saw Palmetto will also be effective in treating people with hair loss by reducing the amount of DHT in the body and around the hair follicles. Although there is no formal study or testing to confirm the effectiveness of Saw Palmetto in treating hair loss, many companies are already preparing topical hair lotions that are formulated with Saw Palmetto and oral supplements are available.

So overall my personal daily regime now, to combat further hair loss, is this:

- 1 mg Proscar
- 1 x application of Rogaine foam
- 3000mg MSM
- Saw Palmetto oral supplement
- Omega 3 fish oils (for general health)
- Multi Vitamin and Mineral (for general health)

Let’s move on and take a look at all the options available for concealing your thinning hair.

Information sources – for full references see Appendix 1:

[www.propecia.com](http://www.propecia.com); various websites and forums; American Hair Loss Association
When I first discovered I was losing my hair I tried all sorts of methods to conceal the truth. I took to wearing a hat most of the time, I re-styled my hair, I shaved my head, I even tried a wig for a short while (least said about that the better!) and I also tried thickeners and concealers. For two or three years prior to my hair transplants, my life was ruled by my hair care regime.

I used some great products such as spray-on fibres, spray-on concealers and paint-on masking products to give the illusion of more hair. You should try these before resorting to the expense of hairpieces or hair transplants. You do, however, need to have some existing hair for these concealers to work. But if you are at Norwood class 2 or 3, it’s a good option to start with.

**Styling and Colour Tricks**

Longer styles and ponytails only emphasise your hair loss so try a shorter cut to give the illusion of more hair. You could also shave it all off so that it looks like bald is your choice and not the result of failing hair follicles. I did try the shaved look but it doesn’t suit everyone and it didn’t suit me.

Hair and skin colour can also play a subtle role in achieving the appearance of fuller hair. A sharp contrast between the colour of your hair and the colour of your skin will accentuate a thinning hair line. As I mentioned in chapter 2, going grey can actually work in your favour because grey hair blends your hair and skin tones well, which results in your hair appearing fuller.

The combination of blond hair and fair skin makes your hair look fuller than black hair and light skin. You could consider colouring your hair to colour to a
lighter or darker colour to bring down the contrast between the hair and scalp colour. Going blond is good or you could consider a slow transition to a sandy hair colour if you have a light skin tone. Platinum blond and glistening white hair reflect light, making it more difficult to see through the hair to the scalp.

Colouring my hair was not a route I tried, being already of sandy hue. I would strongly recommend that you go to a hairdresser who is an expert in colour if you plan to give this option a go. Getting it wrong will look far worse than thinning hair and it takes a good few months to grow out.

The added body of curls or waves in the hair can also help it appear fuller. Some men and women who have naturally straight hair perm it to achieve the appearance of more volume and fullness. There was a trend in the early 1980s for permed hair. It was never a good look though – particularly for men.

On the styling front I recommend you see a good hairdresser or barber who knows hair inside out and can advise you on how to style your hair to minimise the appearance of thinning. And while we are on the subject of hairdressers...

It took me years to find a hairdresser/barber I felt comfortable disclosing my hair transplant journey to in order for them to actually help me by advising the best way to get the most out of my haircut. Previously I would go into random barbers filled with dread, waiting the inevitable question... ‘You had some work done here then?’ I never or rarely returned to the same place more than once out of sheer embarrassment. And this was a mistake.

It used to crucify me in all honesty, even in the early stages of hair loss. I would forever feel unworthy, very vulnerable and downright pathetic in front of these strangers. This anxiety only got amplified after my poor hair transplants. It was only after I got repaired that the dread of the barbers lifted, as it became pretty much impossible for even a barber to clock I’d had any work.
However if I had my time again (regardless of the mistakes I made), I would have tried to find a barber I felt I could disclose my anxiety and hair loss fears to openly and honestly to save the panic and discomfort every time ‘hair-cut day’ came. I should have stuck with one I found early on in the process (the barber I go to now) and not felt so ashamed of my situation. I wish now that I’d had a quiet word with him at the beginning and explained that I needed help.

Finding a barber you feel comfortable with is important, even in the early stages of hair loss, as they can help monitor and help advise on the best cut for you, rather than you just sitting there in sheer fear and silence. They can support you and take the fear out of getting a haircut and they can save you a lot of anxiety in the long run. After all they see hundreds of male heads and a significant proportion of them will be in differing stages of MPB. Your barber will know better than anyone how anxious you are. He’ll have seen it all before – every day of his career.

**Fibre optics**

Well not literally, but fibres can give an optical illusion that there is more hair on your head than there actually is. It may not be as good as the real thing but topical products comprised of coloured organic keratin fibres, with a similar chemical makeup to human hair, can help to conceal thinning hair. These fibres adhere to base of the hair follicles and the scalp, adding bulk to the hair shaft. You apply the product by spraying, painting or sprinkling it on your scalp, to create an illusion of a thicker and fuller hairline. These mostly stay in place by static electricity but fixing sprays are available that add more holding power.

The best known products are Toppik and XFusion. Both are good for the purpose they serve. I used Toppik, though not the spray version which is now
available. Toppik was a real lifesaver for me and was one of the most important items in my box of tricks.

I remember still so vividly that I had to take a little bag of products with me everywhere and would always have to factor application into my plans, especially overnights and rugby matches. Nevertheless the products out there are fantastic to help thinning hair and also to aid post-op too. I also used a product called Couvré (a scalp foundation which I’ll talk about later) which is an awesome product as it aided the illusion of thicker looking hair. It's also great at covering strip scars post-op in the down-time period; I’ll talk more about that in chapter seven. The three products I used in conjunction were Couvré, Toppik and a thickening shampoo.

The products can be fantastic when applied correctly (I always found less is more), especially when you find the one(s) that best suit you. However, they can be time consuming to apply and somewhat of a bind, but very effective. Whatever the manufacturer claims, you will need to give yourself time for trial and error when you first start to use them. Application amount was, in my experience, the biggest issue but once you get it right with the right product for you, it can really help. They helped me though some tough times.

Any hair fibre products should blend in with your own the hair colour, so choose the right colour for the best results – they all have a range of colours. You might need a few tester pots to get the right one. The subtle addition of the extra fibres will diminish any contrast between your hair and scalp colour. The drastic improvement also comes from the fibres adhering to the fine vellus hairs which can make your hair look thicker.

A couple of tips: apply the product before getting dressed, and particularly before you put on a white shirt, otherwise you might find it has some extra
fibres too but of an entirely different colour! And remember to comb through your hair to ensure the fibres are fixed firmly.

How well these products work depends on how much natural hair you have to work with. You need a certain amount of hair for the fibres to cling to.

The one problem with most fibre concealers is that they may not work at the hairline, but with a template placed slightly behind where your thin hair starts, you can create a reasonable illusion of a frontal hairline. Both Toppik and Xfusion offer spray applicators which can be used with their hairline templates.

After the product is on your hair and scalp, it’s very difficult to take off completely, except with a thorough hair wash, so bear that in mind. Fibre products are pretty difficult to disengage (depending upon the manufacturer), with the following caveats:

A light rain won’t affect fibre products because the fibres don’t dissolve in water. But getting caught in a heavy downpour and being literally drenched in water could counteract the static which holds the fibres in place. Be careful when swimming, whatever the manufacturer’s blurb says! Wind shouldn’t affect the fibre concealer because static electricity keeps the fibres clinging to your existing hair.

If you sweat heavily, some products will not run, while others may. Test your fibre concealer at home (rather than in public) to see just how far you can push it with a sweaty head or running your fingers through your hair.

If you still worry that the fibres may shed or loosen, you can always use hair spray. Some manufacturers make a ‘fibrehold’ product to work with their fibres to give you a safety net.

The sad reality about balding is that once it starts, the chances of returning to a full head of hair (without a transplant) are almost nil. So when you start
concealing your vanishing hair line, it’s likely to be a part of your daily grooming routine for the rest of your life. You may get to a point where you become addicted to a product because it can make such a dramatic difference in your appearance (particularly if you have obsessive tendencies). However, as you go through the balding process and lose more hair, you may come to a point when the fibres no longer work as well. At this point you may need to consider alternatives.

**Spray-on Hair**

The best known is Fullmore. It uses aerosol propellant to spray tiny colour-matched fibres that cling to your existing hair and darken your scalp. Toppik also has a spray-on version now.

Sprays are quick to use and offer probably the fastest way to camouflage large areas but you need some hair to have them work well. On the downside, they’re not as precise as dab-on concealers and not quite as natural in appearance with keratin fibres like Toppik in an area with more natural hair still left.

You apply products like Fullmore by holding the spray can around eight inches from your head and spraying while moving the can around for an even result. Put a towel on your shoulders to avoid any overspray. The results are quick, if not quite as convincing as fibres. After application, you should apply a FibreHold spray or a good hair spray.

**Colouring your head**

Products such as Couvré are foundations that conceal hair loss. Similar to women’s cosmetic foundation, foundation for your scalp is created from colouring and emollients (moisturizers) and is applied in much the same way
that foundation is applied to the face. Using a sponge applicator, you simply
shade in parts of your scalp where your hairline is thinning.

What this does is conceal the whiter or lighter parts of your scalp. This masks
your hairline, making it look as though your hair isn’t thinning because the
scalp colouring is brought closer to your hair colour.

Like fibre concealers, scalp foundation will only work to conceal thinning hair
if you have hair in the area to begin with. This material can’t be used on the
hairline to address your hairline issues.

One of the problems with foundation products is that they don’t add fullness to
your actual hair like fibre products do, so you may need to use a fibre thickener
as well. However, foundations do reduce the visibility of the scalp through what
hair you have and this effect may work well if you just have minor thinning. But
if you have a relatively large area that needs covering, a foundation may leave
you with an imbalance of hair-to-scalp ratio. Hair systems or hair transplants
may be the only option for those without enough hair.

You can combine foundation products with fibre concealers, thereby tackling
both the hair and the scalp imbalance. The foundation darkens the scalp enough
so that it doesn’t show through after you use the fibre sprays like Toppik to
thicken the hair that you still have.

As with fibre concealers, foundations can take some time to apply. You may
find it easier to apply over a wider area, painting with broad strokes, but
precision control of specific spots may be more difficult. If you use a fibre in
combination with the foundation, then the foundation should be laid down first.

The hair you have is always styled after you apply the foundation and before the
fibres are used. Many foundation users find that they don’t have to put it on
every day. Some of the products may even last through a shampoo.
Scalp foundations are a temporary fix to a long-term problem. Certainly, masking and concealing something that may be a source of insecurity is one way of coping with the problem at hand. However, you should keep in mind that there’s no longevity to this solution; you have to do it again every day or every other day, depending upon your own situation. (You’ll also need a good supply of cotton buds for ‘touching up’ your hairline.)

**Thickeners (pomades and hair care products)**

Do hair thickeners work? Yes, but their effects are only temporary and they have some limitations. Some men use wax and pomade to make their hair look fuller. These products are the same as those that were so popular in the 1950s when the favoured style for young men was slicked back hair.

In addition to achieving the slick look, these products also add extra thickness to your hair and provide the feeling and appearance of fullness.

A thicker hair shaft increases the fullness of one’s hair exponentially. Even small increments of added thickness can have a major impact on the fullness of the hair. Doubling the thickness of a single hair will increase the overall bulk fourfold. So, thickening each and every hair shaft may produce four times more bulk than having more hair!

There are also thickening shampoos, conditioners and protein hair expanding products on the market, all aimed at aiding the illusion of thicker hair.

In short, the hair thickeners don’t provide the dramatic results of fibre and powder concealers. Hair thickeners work best in the early stages of thinning when you still have plenty of hair – albeit thin hair.
Toupee or not toupee? That is the question

A hair system (also known as non-surgical hair replacement, hair bonding or hair integration process, wig, toupee, hairpiece, appliance, weave or ‘rug’) is not for the faint hearted, and I would certainly suggest trying other options first. I wore one for a while, but it wasn’t a very good one and it didn’t work for me.

Hair systems are a source of great amusement and the butt of a million bad jokes. And not surprising really, when there are so many bad ones out there. It is a real art to make a wig that looks natural and it is very expensive; but it can be done. If you are running out of options then there are wigmakers who are very skilled in their art.

Women seem to have been dealt a better hand than men when it comes to wigs. Women are positively encouraged to keep changing their appearance: makeup, cosmetic surgeries, Botox, hair colour, hair style, hair extensions, etc. Indeed, there is a certain glamour associated with women changing their hair to reflect a changing personality or new stage of life (case in point Emma Watson, who played Hermione in the Harry Potter films, chopped off all her long locks and went for a pixie cut when her contract for the films ended and she was finally free to do what she wanted with her hair and lose the ‘Hermione look’).

While hair styling for men has become much more acceptable and fashionable, we still can’t get our societal heads around wigs as an option for balding men. And if you are wearing one, you may live in a constant state of anxiety about public discovery and subsequent embarrassment. It can be a viable alternative to balding, if you have exhausted all other options and are not suitable for hair restoration. My advice would be to explore all other options first, including becoming at one with your baldness, and only consider a wig as a last resort.
Laser Treatment

‘Laser hair loss treatment uses low-level infrared light energy and penetrates deep into tissues of the scalp, stimulating micro-circulation of blood supply, cell metabolism and protein synthesis. Once the blood circulation in the hair follicles increases, added nutrition is then brought into the hair follicle and then stimulates growth within it. With the utilisation of the laser hair loss treatment, nutrients are then transported to the area of the scalp and then nourish the hair follicle. Laser therapy reactivates hair growth by stimulating live, but weakened, follicles at the cellular level. It does not reactivate dead follicles.’

This is supposedly how it works but in my opinion and from my personal experience laser treatment for hair loss is a waste of time and money. I spent over £4000 on this treatment with a company which advertises its results here in the UK and uses professional sportsmen to endorse it. It did not work for me and the vast majority of people who have tried it and talked about it online have been disappointed. As with all treatments, I strongly suggest you research it thoroughly before spending your hard earned cash on it.

See topics here where laser treatment is discussed:

http://www.hairrestorationnetwork.com/eve/150351-list-doctors-who-consider-lplt-quackary.html

So these are broadly your choices. As new products come onto the market that have proven results and I think will be of interest I’ll add them to the products section on my website so keep checking back on www.spexhair.com for news and reviews.

Now let’s take a look at the place of no return – hair transplants. This is quite a big section so I’ve chunked it down to keep it simple (and readable).
Introduction to the surgical route

In this introduction I’m going to share my journey down the surgical path, the things I wish I’d known before I embarked on this particular voyage. I’m also going to cover what makes a good candidate for surgery, the questions you need to ask of yourself and your expectations. In the next chapters I’ll cover the techniques and all the hard facts and gory details of the surgery itself.

Hair transplantation surgery or hair restoration is not for everyone and it is not something to be undertaken lightly. I certainly recommend you try the non-surgical methods first and **do your HT research thoroughly** before going down this path. Like every area of cosmetic surgery, there are a few excellent surgeons and plenty of mediocre ones. This is a brutal industry, which preys on your vulnerability and your image-consciousness, and there are plenty of people who will relieve you of your money but not satisfactorily relieve you of your hair loss. Some will make matters worse not better.

**My HT experience**

Back in 2000, admittedly when there was a lot less information available on the internet than there is now, I came across an advert for hair transplants with a now infamous chain of HT clinics. I was 24. In my desperation I paid them in the region of £20000 over four surgeries to basically disfigure my scalp and give me even more heartache. I received inappropriate surgery with insufficient consultation which today would not just be out-dated, but unethical. But at the time, I just didn't honestly believe that I had any other option.
I had been on Proscar for some months when I had my first surgery and while it had helped thicken up the hair on the back of my head, it wasn’t solving the thinning at the front. My hairline was receding too rapidly! So in my desperation I grasped at what I thought was the next best straw. It wasn’t, it was a BIG mistake.

The four surgeries I had with this company each used the ‘strip’ method to harvest just 500 grafts. Today (just 10 years later) it would be unethical to do a ‘strip’ surgery for just 500 grafts, when this method is used to safely harvest anything from 1000 to 5000 grafts. What I needed was 3000+ grafts in one hit, which could have been done, but wasn’t. They cut me open four times to ‘achieve’ what should have been done in one (or two maximum) surgeries. It helped a bit but left me with a huge scar in the donor area. The grafts were also cut into micro-grafts which, as you will see in the next chapter, is an inefficient and now inappropriate method for transplantation.

I then had another surgery of 1000 grafts with a company in Canada, which improved things a little. The sum total gave me a better density of hair at the front but an unnatural and slightly wonky hairline, leaving me still extremely self-conscious and anxious (not the result I wanted!). My hairline was stalky and pluggy with inappropriate grafts that were at incorrect angles.

Achieving a natural hairline is one of the most important factors as it frames your face and is the area of hair people see most, including yourself. (There is an excellent article on this on my website http://spexhair.com/the-all-important-hairline-our-facial-frame/). This is why it is essential that the design of your hairline is as natural and as close to what Mother Nature intended as possible. In HT it is done by using the correct grafts (single hair grafts) and positioning them at the appropriate angle and direction. This wasn’t how it was done to my hairline. I was still in search of that natural look.
Then I came across Dr Feller on the online forums. He was talking about procedures I’d just not heard of and seemed to know his stuff. Through research and interacting on the forums daily I saw that he was regarded very highly by many. I decided to meet him and, being a hair transplant patient himself, he had a high level of empathy unlike the others I had consulted with. It was YET AGAIN a huge leap of faith; however, I felt very comfortable that I was not just a number with him. I felt I like a patient this time, one he wished to help.

I will always remember him saying, ‘Tell me what you want to achieve and I will tell you honestly if I can get you there.’ Well, this to me was like a breath of fresh air as other previous experiences and consultations were much more direct and abrupt, with doctors who just told me what they were going to do rather than listening and embracing my personal concerns and goal.

Based on this and the positive reviews on Dr Feller via the forums, I opted to roll the dice again. My first session was to graft 900 + follicles using the FUE method (Follicular Unit Extraction) into the hairline to repair the less than adequate job the first clinic had done and to create a more natural hairline. That was in 2003. In 2004 Dr Feller conducted a couple of smaller FUE sessions to repair the old strip scar. I also had a further graft of 80+ into the scar via FUE in 2007. I’ll explain FUE and strip in detail in the next chapter. You can view the photographs pre and post op on my website http://spexhair.com/my-pictures/

Finally I had a hairline I could look at without wincing and a head of hair that looked like I wasn’t some paranoid baldy trying to cover up the thinning bits. I actually started to feel less anxious and more confident!

The area I did not need work on was my crown. There are a number of issues around transplanting into the crown area though, particularly in relation to the best use of donor hair. There is a good article on my website which I
recommend you read, especially if your crown is thinning and you are considering surgery in that area:

http://spexhair.com/the-crown-important-or-not/

My journey back to a full head of hair was a long and arduous one and there are a number of things I wish I’d known before I started it. I’ll share those with you now, because they are important for you to consider in your deliberations on taking this route.

1. I wish I had known that HTs are a *long-term* commitment, not a short-term quick fix. I really thought that a couple of surgeries would fix the problem and I’d live happily ever after. The HT process *may* require several surgeries – especially if you need to have repair work done as well. The recovery time and growth time is longer than you think. For example, growth of the new grafts starts around month 3/4 and then continues for up to 18 months depending on the individual. Everyone’s hair grows at different rates but generally months 7/8 are the realisation months and month 12/14 is when you can really assess the benefits. Hair transplantation is a slow process - you must be patient.

2. I wish I known that the industry was so utterly brutal and riddled with con men and unethical surgeons. As a vulnerable young guy, you trust any doctor who says he can do it. The sad fact is that most can’t do it at all and only a few can do it really well. You really need to do your homework to find the right doc for you. (See chapter eight *Finding the Right Doctor* for a list of recommended surgeons).

3. I wish I had found the forums earlier to interact and actually speak with others prior to embarking on any surgery. The forums are now SO much bigger,
as is the wealth of information on the internet. There is so much more information out there now about the good, the bad and the ugly. It is much easier to weed out the charlatans from the good guys.

4. I wish I had consulted with various leading respected surgeons to gain real perspective and understanding of my actual requirements and suitability for surgery - rather than just jumping in!

5. I wish I had met with various patients and inspected the results in person, rather than relying on the supposed recommendations of various ‘celebrity’ endorsers.

There is much more information and help out there now than there was 10 years ago. Please use it. Don’t rely on one source – even this one – to make your decisions. Research, ask and investigate! This is a life-long investment, not just a quick fix to today’s problem. I recommend you do six to 12 months research of your own before you let anyone near your head with a follicle-extracting tool.

The one thing I did have in my favour on this HT journey was that I was a good candidate for hair transplantation – at least in terms of my hair characteristics and donor supply. Before getting your hopes up that HT is the route for you, you need to consider whether you are a good candidate and are prepared for the journey ahead in terms of your desires and expectations.

**What makes a good candidate for HT surgery?**

Hair transplantation involves moving follicles from a high-density permanent (donor) area at the back of the head to a low-density balding (recipient) area on
the hairline or in the crown area. But not everyone is a good candidate for HT. There are a number of considerations that come into the mix.

The best candidates for transplant are those who have the following:

- Male pattern baldness which has been progressing for more than five years or that has progressed to at least Norwood Class 3.
- Enough donor hair to supply balding areas and a donor area that is greater than the balding area (more on this in chapter seven). Density can vary widely from person to person. Higher donor density is obviously a great asset. Curly and wavy hair gives better coverage than straight hair and the shaft diameter or thickness of the hair follicle also plays a part (see hair characteristics later in this chapter).
- Very little colour contrast between the skin and hair colour (such as blond hair on a light skin tone, white hair on fair skin, or brown hair on brown skin), particularly if your donor hair supply is limited or you're very bald.

Realistic expectations and a good understanding of the process are also critical. You need to understand that your hair loss might continue to progress even if you are taking prescription medication to stop the progression. You also need to understand exactly what will be happening to your head during the HT procedure and the types of surgery that are available (as well as those you should positively avoid!)

You need to remember that there is a finite amount of donor hair that can be moved to the thinning areas of the scalp. If that hair isn't used in an efficient manner, the outcome of the procedure might not meet your expectations.

If you thinking that having small surgeries to keep up with your hair loss is a practical way to address your hair loss issue, you need to think again. Patients
with a significant amount of hair on their scalps run the risk of ‘shock loss’ of some or much of their existing hair caused by the trauma of the surgical procedure. In some cases this lost hair will not return and you could be left with thinner hair than before the procedure. Shock loss will be covered in greater detail in chapter seven as we get into the hard facts about HT surgery.

**Poor candidates for HTs are:**

- Men with ‘diffuse unpatterned alopecia’ (DUPA). These men have an unhealthy donor supply, making them poor candidates for a hair transplant.
- People with diseased donor supply for any reason. This is more common in women than in men and typical for some forms of genetic androgenetic alopecia in women.
- Those with low hair densities.
- Those with a lack of adequate funds to continue surgical hair restoration over time. Hair transplantation is a long-term solution to a long-term problem. Several surgeries might be needed to achieve the result you are looking for. You need to ensure that the funds are available for the whole programme, because it is just isn’t something you can pull out of once started, nor can you sporadically have a surgery when you’ve got some spare cash.

**Hair and scalp characteristics – why these affect your suitability for transplant surgery**

The characteristics that are most cosmetically important are: hair colour (especially relative to the underlying skin colour), hair curl (or lack thereof), and hair calibre, or cross-sectional area (in other words, is the hair shaft fine or coarse?). The best hair restoration surgeons will take all these factors into
consideration when planning a procedure, in order to give the greatest aesthetic benefit to the patient, with the minimal use of the limited donor hair.

Hair calibre or cross-sectional area is actually more significant than density in its ability to cover bald scalp. The appearance of baldness, particularly where the hair is thinning but still evident, is due to light penetrating past sparse or absent hair, and then being reflected off the scalp. The more hair that is in place to block the light, the less the appearance of baldness will be. Increasing the calibre/thickness of hair would do more to block light than doubling the density (hence the use of hair thickeners). However, there are other important factors.

One of these is the degree of curl. Generally speaking, the more curl or wave the hair possesses, the more coverage it will grant the scalp. An excellent example of this is Afro-Caribbean hair. This hair tends to be tightly wound or kinky, which may be an evolutionary adaptation to protect the scalp in hot climates. Although African follicular unit density tends to be lower than that of Caucasians or Asians, (0.6 FU/mm² vs 1 FU/mm²), the curl characteristics lend this type of hair wonderful coverage properties, as it tends to stand thick and mat-like above the scalp, thus blocking much light. Also, an added advantage is that African hair tends to occur predominantly as three hair units, rather than the two hair units characteristic of Caucasians/Asians with average density.

Hair colour, especially as it relates to underlying skin colour, is also of great importance. The less contrast there is between hair and scalp colour, the better the potential for coverage. A blond person with light skin, e.g. of Scandinavian origin, appears bald only after significant hair loss has occurred. This is because their skin and hair colour appears to blend together. The eye sees a high contrast as standing out and areas of low contrast blending together. This low contrast makes for a good transplantation candidate.
On the other hand many Asians have good density and excellent hair calibre (coarseness), but they may be more challenging hair transplant candidates. Dark, straight, coarse Asian hair is high contrast against relatively light scalp skin; the eye notes the contrast and follows the straight hair shaft right down to the scalp, which appears balder than in someone with more favourable hair characteristics.

We can see then that a combination of many factors plays a part in determining who will be a poor, good or excellent candidate for hair transplant surgery, particularly the FUE method. High density is great but unfavourable hair characteristics may offset some of the benefits of this density. On the other hand, someone with curly, coarse, salt-and-pepper hair (very good characteristics), but with poor donor density, may also not be the ideal candidate.

Scalp flexibility also has a part to play, known as scalp laxity – i.e. how tight or loose your scalp is. A tight scalp (low laxity) is more difficult to remove follicles from and transplant into than a loose scalp (high laxity).

So it isn’t just as simple as deciding you want to have a transplant to deal with your hair loss. There are many factors which will dictate whether it is a suitable route for you. This is where the experienced, artistic, knowledgeable and honest hair restoration surgeon really shines: he knows whether it will work for you, he won’t take your money and then leave you scarred physically and mentally, and he will work with the positive resources you do have, to ensure the best possible outcome for the present and for the future. I’ll go into more detail about how to choose the right surgeon for you in chapter eight.
**What should I be asking myself?**

There’s another bit of research that is critical to your decision process when considering hair transplantation and that is the questions you need to ask of yourself.

It’s all too easy in your panic and desperation to rush off to the nearest or cheapest HT clinic. *Just don’t do it!* A reputable and good surgeon won’t in any case just pop you in a chair and start moving your hair around your head – but there are those that will! HT should be the last method you resort to in managing your hair loss and you need to ask *yourself* some probing questions before you even make contact with an HT clinic. Questions such as these:

1. What level of baldness do I *actually* have?

2. Do I – to the best of my knowledge – have a healthy area of donor hair?

3. Do I understand the realities of what a hair transplant can and cannot do?

4. Have I exhausted other alternatives? (Even if you have male pattern baldness, which could eventually be helped by transplant, hair loss at its earliest stage is best treated with medication. The use of medication may forestall a transplant for years.)

5. Have I researched this thoroughly and given the matter considerable thought from every angle? Do I know what I am going to lose by going down this route and what I am going to gain? Do I understand all the consequences of doing this, including things like time off work, all the financial costs, the cost to my relationships, etc?

Particularly if you are under 25 years you should ask yourself the following questions:

- Have I looked into other options?
Does my hair loss really bother me that much?
Have I given medication a try and waited long enough to see the results?
Have I thought through the financial implications of multiple surgeries over my lifetime?
What will happen if I continue to lose hair after the surgery is done?
What balding pattern does the doctor think I’m heading for?

And the big question you need to consider at any age is: What is my aim in going down the HT route?

Now, the answer might seem obvious – I want my hair back, dumbo! – but there are deeper questions you need to explore.

Here’s a little exercise to help you:

Imagine yourself with the head of hair that you really want. Imagine what your life is like with that head of hair – what do you see, hear and most importantly, feel now that you have it? Now focusing on those feelings write down three words that describe how you feel – use simple words e.g. confident, energised, focused, light, motivated, etc rather than complicated phrases.

Now focus on those three words. What do you already do or have in your life right now that gives you those feelings? What else would give you those feelings now or in the future? Survey your life for anything (I mean anything) that can be described with any of those three words.

Putting your attention on those aspects of your life where you already have those feelings, or that could give you those feelings, will help you feel happier right now and help you put your potential HT into perspective. Because having an HT is not a panacea for making your life better. It won’t solve all your problems nor will it automatically make you happy. It certainly might help and it certainly will make you feel better about your image. But it isn’t the only
way. Be certain that your motivation for having that HT is a realistic one and that you aren’t just pinning all your hopes for more happiness in your life on that one thing.

**Your expectations**

When you are venturing into HTs it’s vital, in my opinion and experience, to have a very good understanding of YOUR expectations. It’s important that you understand that your hair's characteristics, donor supply, donor density, laxity, physiology play the most vital role in the short/long-term success of your HT. A competent doctor should work with you to plan the best surgery to get the results you want to achieve, but it needs to be an achievable result. The best doctors are good, and some can even perform miracles, but you need to help them with realistic expectations. You need to understand that Patient X's hair characteristics may provide them with a completely different cosmetic result compared to yours – even though they had similar graft counts.

Obviously we all try to compare our own situations to various posters or pictures of other guys with similar loss patterns and we all obviously hope for amazing results. BUT although you might feel you are very similar to patient X, it doesn't necessarily mean you are going to end up with the same result - especially not first time round - and this is where your expectations need to be kept realistic.

Everyone wants to have their situations resolved first time round via HTs but this is very rare. No one gets just one HT - even guys with minimal loss will obtain hair greed and want even more. It’s the nature of the beast: hair and money – we always want more.

The point I am trying to get across here is have a realistic expectation of what you are setting out to achieve - and be aware that YOU the patient need to be
aware of the variables that you bring to the table (your hair characteristics, donor supply, loss pattern, personal goal, donor density, laxity, physiology, previous surgery, etc). The experience of the surgeon is applied to you as an individual in order to enable YOU to reach the maximum potential from YOUR session. Male pattern baldness might be a common affliction but your hair, your density, your thinning areas are all unique to you.

When you are considering the transplantation route you should always meet with the surgeon in person before the day if possible. Once the surgeon can see you in person then the exact and most appropriate plan can be established, combining your personal goal and their experience for the best way to go. Even if you have not met with the surgeon before the day, you should discuss your personal goal in great detail and go through the design and hairline position, plus all the personal factors mentioned above before letting him go near your scalp with a knife! This discussion will also determine which method of harvesting is going to be most appropriate for you, and we’ll look at the options in the next chapter.

So now you’ve got an idea of the things you should consider and the research you need to do BEFORE you book an HT appointment, let’s take a look at what you have to look forward to with an HT. First up the techniques used in modern HT surgery and the techniques you should run a mile from!

Information sources – for full references see Appendix 1:
American Hair Loss Association, International Alliance of Hair Restoration Surgeons, Hair Loss and Replacement for Dummies (book); www.fellermedical.com
Techniques of hair transplant surgery

Hair transplants have been performed since the 1930s but some of the methods used would literally make your hair stand on end. I’m not going to go into detail about the history of transplants nor some of the appalling ways it was done. You can read all about it on the internet if you really want to, but I wouldn’t do it while you’re eating your dinner. What I am going to do is inform you about the best methods currently available, in my opinion, and some of the methods which are totally out-dated and you should avoid at all costs! I’ll also share my experiences and tell you what you need to know about the surgery process – the things a good surgeon should tell you and be wary if they don’t!

Let’s look firstly at the types of surgery commonly used.

Modern methods of HT surgery
The two main techniques enable surgeons to remove different amounts of grafts in one sitting. Both come under the title of Follicular Unit Transplantation Technique (FUT). The FUT technique identifies your natural hair groupings in follicular units. These are removed from the surrounding skin in a way that leaves them intact. They are then placed in your recipient area with the appropriate density, distribution, direction, angles and orientation to give a natural result.

The two techniques for ‘harvesting’ the follicular units are:

- The Strip Harvesting technique which involves removing a strip of scalp containing a large group of follicular units from the donor area
The Follicular Unit Extraction technique which involves removing one follicular unit at a time directly from the donor area.

You can view videos of these techniques at: http://www.hairlosslearningcentre.org/content/Treatments/surgical_procedures.asp

**The Strip Method**

During this procedure, a strip of skin is removed from the back of the scalp. The area from which it was removed is then closed using sutures or staples. The hair roots are very carefully removed from the strip under a high powered microscope. The sutures or staples are removed about 10 days later. In the majority of cases a very thin linear scar remains which is easily covered by surrounding hair.

The average size of a Strip case is about 2500-4000+ grafts in one sitting. I have had both Strip and FUE surgery and they both have their place within the industry. The best technique for you personally will essentially come down to the amount of baldness you have to cover. Most people are concerned about the Strip method because of scarring.

A word on scarring, then, before we move on to the advantages of Strip.

I understand the reservations regarding Strip, everyone is worried about scarring but even FUE causes scarring! It’s quite normal to have this fear pre-op; however, once you’ve had the session done the scar is an absolute non-issue in most cases.

You may choose to wear your hair quite short now to limit the clash between the thin hair on top and the thicker hair at the back. It’s very common. However
when you have an HT and have hair on top again, it enables you to grow your hair out on the sides and back because you now have no contrast. You will actually want to! The scar is unlikely to show when the hair is grown over it. However, a good surgeon will always work to minimise the scar so it won’t be an issue – even if you want to buzz cut your hair.

Many HT veterans clip on a grade 2/3# and there’s no evidence of their scar or their HT, although it all depends on your physiology. Many fixate on the scar before actually even having it but 99 per cent then don’t even think about it.

If you want to see some scars, or lack of, there are links to scar videos on my website www.spexhair.com

**Advantages of Strip**

The main advantage of the Strip method is that it can be significantly less expensive than FUE. It often requires fewer sessions to get a satisfactory result, mostly because more follicular units can be removed with Strip in one session, and hence the cost is lower.

Other advantages include:

- More robust follicular units – the follicular units harvested from Strip grafts can be healthier and more robust than units obtained by FUE. This is because the grafts are dissected from the strip of scalp under a microscope, so the technician can dissect and meticulously assess all the grafts and actually see that he/she is getting the entire follicular unit. With FUE, each unit is removed individually directly from the scalp, which is a much more challenging process and it isn’t as easy to see exactly what you are getting.
• You don’t get buried grafts with the Strip method. With FUE, occasionally a graft is buried in the subcutaneous tissue when the surgeon is trying to extract it. If it is not surgically removed, it can form a cyst.
• Follicles do not need to be left alone in order to prevent any bald patches or bald strips as they do with FUE. Strip makes better use of the donor area – certainly for initial HT sessions.

**Follicular Unit Extraction (FUE)**

It actually causes more scarring than Strip but it is spread out, not localised and therefore less visible. FUE is performed by removing the hair follicles directly from the back of the head and placing them into the thin and bald areas at the front and top of the head.

The follicles are removed with tools specifically designed for FUE extraction. This tool makes tiny incisions of approximately 1mm or less to free the hair roots. After removal, the tiny holes that are left heal within a few hours and then virtually disappear. You can see an animation of the FUE process here: FUEperforation.gif

It is an incredibly labour intensive process, because follicles are extracted individually. It is also much more expensive than Strip because of the time involved. The average size of an FUE case is about 800-1000+ grafts in one sitting.

Everyone I speak to wants FUE. What you need to understand is that FUE is a very difficult procedure to perform and there is a reason the best FUE clinics only perform small sessions of up to 1000 grafts at a time.

There are two techniques for FUE:
In the one-step technique, the doctor uses a sharp punch to surround the targeted graft and then pushes it into the scalp to a depth of approximately 5 mm. The edge is grasped with forceps and the entire graft is pulled out from the scalp.

In the two-step process, the skin is cut to a depth of less than 1 mm and then the doctor uses a dull punch to dissect the graft from the deep structures below the skin. The freed graft is grasped with forceps and pulled from the scalp.

The advantage of the two-step over the one-step technique is that the extraction process minimises (but doesn’t entirely eliminate) injury to the follicles in some patients.

Both Strip and FUE methods are performed under a very high powered microscope and require shaving down which we’ll discuss in the next chapter.

**The advantages of FUE are:**

- There’s no linear scar in the donor area. Of course a scar always results from every skin incision, but since scars are very small and scattered in a larger area, they often aren’t detectable even when the hair is relatively short.
- Useful for those with a greater risk of donor scarring
- Ideal for repairing donor scars
- There are no sutures or staples to be removed. The small donor wounds are left to close on their own and they heal within a few days.
- There’s minimal discomfort in the donor area after the grafts are removed.
- No limitations on strenuous exercise after the procedure
- Provides an alternative when the scalp is too tight for a Strip procedure
- Extends the dimensions of the donor area (but not necessarily the total number of grafts)
• Enables finer hair from the nape of the neck to be harvested and used at the hairline or for eyebrows
• Makes it theoretically possible to harvest non-scalp hair e.g. beard or body hair
• Most useful when a limited number of grafts is needed

And the disadvantages of FUE:

• Not everyone is a good candidate for this procedure. You may need a biopsy to determine whether your surgeon can harvest your follicular units without significantly damaging the hair follicles.
• It is considerably more expensive than Strip harvesting, for the reasons described above.
• For the same number of grafts, FUE takes more time, sometimes over twice the time, when compared to a strip procedure. This is why it is generally only used for small graft sessions. A smaller number of grafts can be harvested with FUE than with Strip.
• FUE produces small puncture scars. That means that if you shave your head, you may see small, whitish dots. The scarring and distortion of the donor scalp from FUE can make subsequent FUE sessions more difficult.
• A large area of the scalp needs to be shaved or clipped very short when a large session of over 600 grafts is performed. This may require a radical change in hair style for a while.
• FUE can produce damage that ranges from cutting of the hair follicles to destruction of vital elements of the graft in the hands of inexperienced surgeons. The percentage of such damage should be under 10 per cent but that’s still a significant amount, considering that in traditional Strip harvesting surgery the follicular units taken from the strip under the microscope are mostly perfect.
• It is more difficult to capture the entire follicular unit and more difficult to obtain a natural distribution of follicular units. For efficiency, the largest follicular units are targeted, but these may not be ideal for the hairline.

• Grafts are more fragile and subject to trauma during placing since they often lack the protective dermis and fat of microscopically dissected grafts. Microscopic dissection may still be needed if the number of single-hair grafts is inadequate.

• There may be problems of ‘capping’ – this occurs when the top of the graft pulls off during extraction.

• Problems of buried grafts and ensuing cysts – this can occur during the blunt phase of the two-step technique when the graft is pushed into fat and must be removed through a small incision.

**Important to note:**

*Strip is a much better way to utilise your donor area more efficiently and effectively long-term. FUE is only suitable for small sessions up to around 1000 grafts and you get a lower yield from your donor area. Strip enables you to use your donor supply safely and enables you to achieve more grafts in one session while managing it effectively for further sessions if needed. Once you have used up the strip donor sufficiently THEN it’s a better idea to go in via FUE to tap in to further donor supply. FUE is not magic – you will soon run out of it as a supply of donor hair.*
**Graft size**

In hair transplantation, size does matter! The size of the grafts makes a big difference to the end result, and smaller is better. The uneven, patchy effect of large, pluggy grafts occurs when a surgeon uses larger grafts containing many follicular units and the spaces between the grafts are wide. As the grafts heal, they contract and create a contrast between the skin and the clumps of hair. You might think this won’t happen anymore with technology being what it is – but you’d be wrong!

While the term ‘follicular unit transplant’ may be common with most well-informed patients and doctors today, not all doctors and their teams have the knowledge or the technical capacity to perform transplants made up exclusively of follicular units. Only a few surgeons have mastered the ability to control quality efficiently while performing Strip and FUE. The learning curve is very slow. When time is money, some surgeons are still opting for the money over the efficacy of the result.

So some may use different graft sizes and hybrid techniques to speed up the process, at the expense of the final result, and some may use out-dated methods to try to achieve more with less effort. It is definitely a case of buyer beware! Do your homework and ask a lot of questions! If the surgeon offers you anything other than Strip or FUE, with single follicular unit grafts, walk away and find another clinic.

*What you should know about graft size*

You should be very wary of large hair grafts. Large hair grafts placed in a frontal hairline look pluggy and unnatural. Basically they just don’t work on the hairline.
When large hair grafts are placed behind the hairline or in the crown, they look like patchy clumps of hair and these are very difficult to disguise or camouflage.

As healing occurs the grafts contract, pushing the hairs in the graft together and increasing the density of the hair within the graft (but potentially creating gaps between the grafts). The hair density within these larger grafts can exceed the hair density in the donor area, which combined with the appearance of space between the grafts just adds to the ‘pluggy’ look. Larger hair graft repairs just force you to undergo multiple transplant sessions in the quest for natural-looking results.

Hair follicle cells have a very high metabolic rate and they require more oxygen and nutrients than other cells. If the graft is too large, the cells of the follicles in the centre of the graft may die before sufficient oxygen and nutrients can reach them. The follicles at the periphery of the graft survive because they’re close to the body’s nourishing oxygen and fluids. When hair finally grows from larger grafts, those in the centre die and this creates a doughnut configuration, with hair at the edges and a bald central area of skin. This is one of the numerous reasons why the good surgeons have changed to the use of follicular unit grafts.

Small hair grafts (referred to as mini and micro-grafts) were more widely used before FUT became the gold standard it is today. My first four surgeries were using micro-grafts, which is largely why I was left with an unsatisfactory pluggy look and unnatural hairline. Mini and micro-grafts, along with the larger 3-4mm ‘standard’ graft, should be avoided at all costs.

I always recommend Follicular Unit Transplantation (FUT) over mini/micro-grafting for a number of reasons:

- FUT, when placed in adequate quantities, produces a fuller look; the grafts can be of the same size (or even smaller) than micro-grafts yet contain more hair and less skin.
• Follicular unit grafts are less bulky, so recipient wounds heal more quickly. The sites in the recipient area are smaller, making the results look more natural.
• FUT allows the surgeon to distribute grafts to mimic the way hair grows naturally in your own scalp.
• FUT enables the surgeon to restore more hair using a smaller amount of donor tissue than with mini-grafting or micro-grafting, because of the greater precision of the harvesting process.
• The skin between the follicular groups is trimmed away when only follicular units are used, and the vital support structures around the unit are preserved.
• Because of the very small recipient sites, larger concentrations of follicular units may be safely placed into the bald area, opening up the possibility of creating a higher hair density in a single session. More density in these recipient sites reduces the necessity for multiple procedures. You benefit significantly with less time devoted to hair restoration surgery without sacrificing the quality of the grafts on close inspection.
• Scarring is significantly less with FUE methods.

Developments are happening in the industry all the time. Ultra Refined Follicular Unit grafting is now becoming more widespread as even smaller instruments become available to surgeons and I’m certain it won’t stop here. [http://www.hairlosslearningcenter.org/content/Treatments/ultra-refined-transplants.asp](http://www.hairlosslearningcenter.org/content/Treatments/ultra-refined-transplants.asp)
Techniques to positively avoid!

There are a number of totally out-dated and unethical hair restoration techniques, which some unscrupulous surgeons still use. It’s all down to money. In order to perform state of the art FUT, a surgeon or medical group has to change the infrastructure of their practice. They have to hire and train a full time staff of technicians, and purchase expensive binocular stereomicroscopes.

The time needed to perform FUT is much longer than older, out-dated techniques, and can take anywhere from five to 10 hours. The clinic will be performing far fewer procedures while honing their new skills. Time is money and many surgeons are not willing to lose money.

As I have said many times, this is a brutal industry; many clinics are happy to prey on your anxieties and vulnerabilities to make their fast buck. The following processes are out-dated and potentially dangerous procedures and you should run a mile from any clinic or surgeon that offers or performs them.

Mini-grafts and micro-grafts

These consist of multiple (partial or complete) follicular units along with the intervening skin.

Although mini-grafts and micro-grafts were a significant improvement over larger hair grafts, they’re now out-dated and problems are common:

- Surgeons may move more hair in mini-grafts and micro-grafts but these grafts appear clumpy if they’re not limited to the natural growing groups of hair.
- Mini-grafts and micro-grafts aren’t harvested with a high powered microscope, so many follicular units are broken apart and the hairs within them can be split during their preparation, which produces significant hair
damage and a reduced hair yield.

- Micro-grafts tend to have more skin in the graft. Even micro-grafts containing as few as two or three hairs may contain the skin between two follicular units, which is unnecessary.
- Micro-grafts look thin when used exclusively over the entire head and may produce inconsistent graft growth. Follicular damage also contributes to this thin appearance.

**Linear or Line Grafts**
A 3-4mm linear strip of donor hair is removed from the side or back of the head and the entire strip or large parts of it transplanted into the recipient area. In order to transplant the line graft, a trench must be surgically cut into the bald area and the graft is placed into the trench. As hair grows, it looks like a completely man-made line of hair – not at all attractive.

**Round or Square Grafts**
These are the original, standard (and now very out of date) 3-5 mm grafts. They are just too large and do not even remotely resemble the way hair naturally grows. When transplanted, because the grafts are so large and therefore compromise the blood supply, hair in the middle of the graft often does not grow, leaving you with a doughnut effect. Cobble-stoning is caused by this procedure.

**Flap/Hair Flap**
This procedure is major surgery and should not be performed under any circumstance for a man with normal male pattern baldness. A flap of skin is moved from one side of the scalp to the front hairline by cutting it on three sides, keeping it attached to its blood supply. The flap is generally one inch wide and approximately three to seven inches long. It has to be twisted so that the hair-
bearing side of the flap is facing outward from the head when it is stitched into the surgically removed balding area. There are numerous problems associated with this surgery, including horrific scarring and infection risks.

It’s hard to believe anyone even thought this procedure was a good idea for normal pattern baldness. Do not go anywhere near any surgeon who performs this procedure as a remedy for MPB.

**Scalp reduction**

Performed under local anaesthesia, the bald part of the scalp at the top or crown of the head is removed, and the edges of the nearby hair-bearing skin are sewn together, bringing the scalp from either side to meet in the middle. In some cases a hideous scar results commonly known as a ‘dog ear’ scar. In 100 per cent of cases there is a ‘stretch back’ in the scalp, where it loses its natural tightness and stretches, leaving a visible bald area of scar tissue. There are many unpleasant and unsightly risks and at best it does not solve the problem!

Like the Flap technique, it’s hard to imagine why anyone thought this was a good long term solution. Scalp reductions do not preserve hair for use in future transplants, as some surgeons may try to claim. This procedure just thins out the permanent hair that would normally be used as donor hair for transplantation.

There are a couple of other radical procedures (hair lift and scalp expansion) which are rarely (thanks goodness) offered these days, and certainly should never be offered as a solution to MPB. If you really want to know about them, a Google search should throw up all you want to know (and a lot that you really don’t!)

So hopefully you now know that if you are still determined to go down the route of HT surgery, you should be looking for a very experienced surgeon, who only performs Follicular Unit Transplantation and will discuss in depth the best way
to harvest and preserve your donor hair. I’ll tell you more about choosing the right surgeon in chapter eight, which is dedicated to that subject.

In the meantime, let’s look at some of the other techniques of surgery that you need to be aware of and prepared for.

**Closing techniques**

Any surgery will produce a scar. Scars in the hair transplant donor area after Strip harvesting generally have a width of 1-3mm in the majority of patients. A small percentage of patients (2-3 per cent) may have slightly wider scars, depending on their physiology. The trick is to minimise the scar’s visibility through using appropriate closing techniques.

Dr William Rassman MD wrote a very useful post on his blog in 2006 about closing techniques. Even more useful were the excellent diagrams drawn by Jae P Pak MD. These really show the difference between the techniques. As they say, a picture paints a thousand words! The original blog post can be found here: [http://www.baldingblog.com/2006/04/07/techniques-to-minimize-donor-area-scarring/](http://www.baldingblog.com/2006/04/07/techniques-to-minimize-donor-area-scarring/). I have used Dr Rassman’s description of the techniques.

*Fascial Closure Technique:* A fascial closure can be utilised to reduce wound tension when two skin edges are brought together, therefore reducing the likelihood of scar stretching. Before exterior sutures or staples are placed, we imbricate (overlap) the underlying fascia, which is the fibrous tissue network located between the skin and the underlying structure of muscle and bone beneath the skin. (*Fig. A*) A more complex fascial closure is made when tunnels are created below the fascia to further reduce tension upon closure. (*Fig. B*) The final sutures or staples on the skin are not shown in the diagrams.
Trichophytic Closure Technique: A trichophytic closure (‘hair loving’ in Latin) promotes hair growth directly through a healing wound. For many years plastic surgeons have used this technique while repairing hairlines during brow lifts or in conjunction with face lifts. A small piece of one wound edge, as well as the corresponding hair, is removed. When the wound heals and a scar is formed, the buried and partially cut hair follicles will begin to grow through the scar. (Fig. C) Since hair follicles cut in this manner resume growth, there is no unnecessary follicle waste. When scars are wider than the 2-3mm range, this closure technique is less effective, because it typically promotes hair follicle growth only within a 2-3mm width where the trichotomy was done.
However, both of these techniques do not account for patient variability. The physiology of wound healing and scar formation is a very complex matter with numerous books devoted to the topic. Some patients heal with a virtually undetectable scar, less than 1mm, without any special closures while others form a wider scar despite fascial and trichophytic closures. Scars within the 2-3mm range are widely accepted since surrounding hair growth usually disguises any scar formation and few of my patients ever complain of a 2-3mm scar (Fig. D) that they cannot see.

As important as the closure technique is to the donor area, the insertion technique is also crucial to the recipient area. The gold standard for insertion of follicles is the Lateral Slit Technique.

**Lateral Slit Technique**

The Lateral Slit Technique places grafts horizontally with slits made with head and tail in the direction of ear to ear. Until recent years, grafts were placed vertically with slits made with head to tail in the direction of front to back, largely because the instrumentation wasn’t suitable for lateral slitting. However, with the development of smaller blades, smaller more well refined grafts and denser packing, the lateral slit became the technique of choice.

Until follicular unit grafting, all grafts were cut into the now obsolete mini and micro-grafts. A lot of extra tissue was kept around the graft because it was easier to extract that way and it provided extra protection for the graft when being handled. When grafts started to be divided into follicular units, it became obvious that the natural anatomy of the hair follicle was flat and that the hairs tend to grow out of the graft in a straight line with follicles lying next to each other.
The best way to maximise the coverage of the scalp was by orienting these grafts so that they lie flat as they would naturally. The Lateral Slit technique was the only way to achieve this and so it became the most effective way to insert grafts.

This technique has also enabled denser packing of grafts. Rather than the pressure of displacement of each newly placed graft extending out toward its neighbours causing a ‘pop out’ of previously placed grafts, lateral slitting redirects the pressure of displacement by 90 degrees into the area above and below the graft, thereby minimising lateral pressure. The bottom line is that you can transplant more densely than with vertical slits.

**Dense Packing**

Dense packing is a relatively new concept. It was really made possible through the introduction of new machinery enabling the surgical tools to be customised to the size of the graft. (Previously the graft size was dependant on the size of the tools used.)

Because of these smaller instruments, the grafts can be placed much closer together without hurting the skin or blood-flow underneath. Thus you can ‘dense pack’ for a thicker result.

When dense packing is combined with a ‘mega-session’, you have a formula for providing the greatest amount of hair, with the thickest possible result, with the greatest possible coverage, with the least amount of trauma to the skin, in the fewest number of procedures possible.
Mega-sessions

A mega-session is just a very large numbers of grafts in one procedure. The actual number of grafts is variable from clinic to clinic. It can be anything from 2000+ grafts in one sitting up to 5000 grafts.

In the typical mega-session, single hair grafts are placed into the first centimetre of hairline to ensure the most natural transition from the forehead into the new hair. Behind the new hairline two hair grafts are placed to make the hair look thicker on the top, and then three hair grafts are used in the zone behind that to also add to the thickening effect. The result is a properly balanced and natural looking hair restoration.

The benefit of a mega-session is that it reduces the number of surgeries you may need to achieve a significant cosmetic difference as well as reducing the price of the overall hair restoration plan in general. However, in order to perform proper mega-sessions, a hair transplant clinic must have a team of seriously skilled staff. Preparing and manipulating thousands of tiny hair roots is a considerable challenge and requires a truly experienced and trained team of technicians as well as a meticulous doctor. When you’re interviewing HT clinics to perform your procedure make sure you find out how many full time technicians they have and how many will be guaranteed to work on you and you alone during your procedure.

I think we have now exhausted the techniques so let’s consider all the other aspects of surgery that you need to be prepared for.

Information sources – for full references see Appendix 1:
In this chapter we’re going to consider some of the other aspects of surgery that you need to be aware of and things that can affect the success of your surgery or even your eligibility to have surgery at all. Beyond the actual techniques there are things you need to know or do before you embark on the surgical route.

Before you even get in the chair you will need to be in control of your mindset and you will need a clean bill of health on your blood.

**Mindset and Obsessive Compulsive Disorder tendencies**

I’m starting out with this one because managing your mindset and your anxieties is crucial to coping with the rigours of HT surgery.

It’s not uncommon to have OCD tendencies, I have them! After helping many guys over the years, it’s clear that OCD resides in many of us as hair loss sufferers, if not all to some degree, and this condition is brought to the surface only too quickly when dealing with our hair loss issues, as we have little control and a whole heap of anxiety!

I think it’s vital as a potential hair loss sufferer and especially a hair transplant patient you be aware of this; OCD is a condition that can control your mindset more than you realise and you can become a little bit too fixated on things, causing you further stress and frustration. Perspective gets lost.

I think also if you are aware you have OCD (many of us do) then you need to consider this when embarking into HTs. Will you actually ever be happy with your hair? Will OCD allow you to be?
This is partly why the work you did in chapter 1 (to gain some perspective on your hair loss and realise there is more to you than your hair) is so important. Some patients I have met and liaised with should never have had HT surgery, not because their physical situation didn’t make them eligible, but because their mindset was stuck in ‘never satisfied’. I don’t honestly feel these patients will ever achieve their desired goal, they won’t be satisfied whatever the outcome.

This is also why it is so crucial to manage your expectations too. Your doctor can only do so much to get you your goal; you must be aware of sabotaging your own satisfaction. We all have a desire for more hair but there is a point where you need to be satisfied with where you are now.

You might not even be aware of how obsessive you have become about your hair. But here’s a clue – how many times do you look at yourself in the mirror on a daily basis? If you are checking your hair more than 10 times a day in any mirror you can get your hands on, then you are getting obsessed. And if you have a ritual to check your hair before you can go anywhere or do anything, then you are certainly compulsive.

*In which case, you must discuss this with your doc when you are planning a transplant, because surgery can amplify your anxiety, especially post-op when you are waiting for your hair to grow.*

OCD defined: *Obsessive Compulsive Disorder* is characterised by intrusive thoughts producing feelings of uneasiness, apprehension, fear or worry; by repetitive behaviours aimed at reducing anxiety; or by a combination of such thoughts (obsessions) and behaviours (compulsions). The symptoms (from repetitive hand-washing to ritual mirror-checking) can be alienating and time-consuming, causing severe distress to both the sufferer and those around them.
**Blood work**

It is very common for HT clinics to require you to have ‘blood work’ performed prior to having a HT session. I cannot stress the importance of this enough!!! These tests are compulsory at most clinics and, without the tests being performed and official proof of the result, the HT surgery will not be conducted.

Check with your particular clinic but you will be more than likely required to provide test results for HIV, HEP B and HEP C.

The easiest and cheapest way to get these performed in the UK is to visit your local G.U.M clinic. (An internet search will bring up your local clinic). In my and many others’ experience this is by far the best way to have these tests conducted. They will be able to perform the tests and provide you with a letter/certificate within 10/14 days; it costs approximately £30 (for the letter).

The service is totally confidential and they will not inform your GP. (If you are getting blood tests done in the US, ask your clinic for the companies they recommend.)

Specifically ask for a confirmation letter prior to the tests because without it the tests are pointless. **YOU NEED THAT LETTER!**

These results of your tests need to be faxed over to your chosen clinic two weeks prior to your surgery. Otherwise you might have incurred a whole heap of expense to get there and the surgery can’t be performed. Same day tests can be done but are **very** expensive.

Hopefully I haven’t freaked you out on your obsessiveness or the idea of blood tests. I did tell you that the hair transplantation route is not for the faint hearted! I’m now going to go through a number of other issues and considerations which you need to know about before you hit the trail of finding the right doctor to do your HT surgery.
**Donor supply/donor area**

Respecting and protecting your donor reserves is vital and both you and your doctor should be paying particular attention to this in planning for future hair loss and possible future procedures.

I’m sure you know a bloke who has Class 7 balding – your granddad for example. They have a halo of hair around the back and not much on top. So if you think of this halo of hair, that’s a graphic representation of the limits and confines of the donor area. This is the hair zone that is considered permanent. For some reason this area of hair is not affected by the balding gene (there are rare exceptions).

The boundaries of this area extend from in front of the ears, around the temples, and to the back of the head. The hair at the temples may recede back toward the ear and the balding area of the crown may dip quite low into the back of the head.

Your doctor (and you) must always assume that you will eventually advance to this level of balding. Why? Because if the donor tissue has been taken from outside this area – too low or too high – then visible scars may be revealed if the baldness advances. It is so imperative that you respect that donor area – no matter how keen you are to get your grafts done.

When the old harvesting techniques were used (like punch grafts or small strip harvests) and scarring was much more evident, not only was it cosmetically unattractive, it also rendered further strip harvesting difficult. This is why additional surgery and repair work depends so much on how the donor area has been affected by previous surgeries.

Preserving the donor area for possible future transplant work is an absolute necessity and any surgeon worth his salt will have that at the front of his mind while working with you. Even if you are older, have ‘stable’ baldness and you
are satisfied with your hair transplant outcome, the day may arise when your hair loss accelerates. If your donor area has been properly conserved, you should have sufficient reserves for additional procedures. If not, then your options are very limited.

Single Strip harvesting, which we discussed in the last chapter, is the technique with the most hair-conserving potential. Large sessions of Strip-harvested follicular units is probably the most efficient method of transplantation for overall coverage and conservation of the donor area and supply.

Everyone is different though. What you bring to the table in terms of hair characteristics, hair density, physiology, etc and wealth of donor follicle supply in your donor area will all have a bearing, not just on this surgery but on the future management of your hair. Talking all this through with your doctor is very, very important.

**Shaving down**

Shaving down (also known as buzzing down) is pretty standard these days with modern hair transplantation and you will find all top clinics will do this. The recipient and donor area require shaving in order to enable precision removal and appropriate placement.

Some clinics will offer non-shaven surgery for smaller sessions – or where the client is in the public eye and wishes to keep the transplant under his hat (literally and metaphorically!). And some are achieving very good results. As technology improves so do the options available.

I *personally* think working in an unshaved area is not optimal, because no matter how well grafts can be placed into the unshaven recipient area, they can
always be placed faster, closer, more efficiently, and with less handling into shaved recipient areas. No clinic has ever disputed this fact.

There are multiple technical factors that come into play during the creation of recipient sites and the subsequent graft placement, which require the area to be shaved.

When thinning areas are shaved down, the thinning process takes on a different meaning. With the use of magnification it will be seen that some follicular bundles are absent (and there are wider spaces between remaining bundles) and that some bundles are significantly miniaturized. It will then be possible to place new recipient sites in the place of absent bundles and alongside miniaturized bundles to recreate the density.

This can also be done in a uniform manner so that if the pre-existing hair eventually disappears, due to progression of hair loss, the transplant can still look reasonably natural. If the recipient site is not shaved, the surgeon must part through the hair again and again looking for any empty spaces and trying to fill the spaces as best as possible. You will get better, more accurate results with a shaved recipient area.

When hair is shaved, no manipulation of the pre-existing hair is required at all. When the hair is not shaved, it needs to be combed through (often hundreds of times) by the surgeon who makes the recipient sites and again by the technician who places the grafts into the sites. This repetitive trauma of combing through the hair again and again will result in ‘shock loss’ (shedding of the existing hair). Whereas if the hair were shaved, it would grow from day one and keep growing.

Also the hair exits the scalp at an exact angle. The only way to precisely match that angle is to buzz the recipient hair down (in a way similar to how all doctors need to shave the donor hair when taking out the donor strip). Cutting into
existing hair below the skin surface is a risk if the incisions are not made exactly parallel to the surrounding bundles.

Doctors don’t shave down to cause you inconvenience or to piss you off, it’s to benefit YOU and YOUR end result. If I were to go back for another HT, I would not want the doc performing on me to have anything in his/her way to achieve the absolute best result possible and provide them with the absolute best working environment. I would shave down with no hesitation at all.

**Shock loss**

Shock loss is when you lose the pre-existing hair in the transplanted area, not the transplanted hair follicles. It occurs when the native hair is weak and isn’t strong enough to resist the trauma that’s going on around it. More often than not the hair that has gone into shock will grow back but after two to four months - after the resting phase in its growth cycle. Hair that goes into shock and doesn't return is hair that was inevitably on its way out anyway and wasn't strong enough to re-grow. It is highly unpredictable and there is no hard and fast rule to avoiding it - especially if you are transplanting into existing hair.

There is a much higher chance of shock loss with increased tension or trauma to underlying blood vessels with reduction of blood supply, infection or haematoma formation (blood clots). Shock loss has a great deal to do with the skill of the surgeon and his ability to minimize trauma BUT it can just happen anyway, no matter how clever and careful the surgeon is.

The risk is significantly lessened in the hands of a skilled physician using the FUT process. However, it is risky if you are in the hands of a surgeon using older technology and larger instruments to make incisions and insert plugs, mini-grafts, or micro-grafts.
There are other factors that also seem to either heighten or lessen the risk. Those with diffuse thinning seem more prone to shock loss than those with receding hair because the hair in a diffuse thinning area is often less stable. Very often, a lot of the hair in a diffuse area is ‘on its last legs’ and in the latter stages of the miniaturization process.

Conservative placement around existing hairs without super dense packing can also minimise shock loss to an existing area.

Propecia (Finasteride) is known to help minimise the risk of shock loss.

It also seems to be more evident if you don't shave down for HT, from my experience of talking to other HT veterans.

I had some shock loss with each HT. I noticed for HT #2 that shocked native hair started to return at around nine weeks post-op. I could tell the difference between it and HT hair as the shocked native hair came in coarse like beard stubble versus HT new growth being very fine. If you make it to four weeks post-op, then more than likely you will not have shock loss.

**Down time**

This is a very common question associated with getting an HT and one of the most common reasons for not getting one sooner in many cases. Many guys know which surgeon they are going with after much research but then need to wait months, sometime years to get an appropriate window of ‘down time’ in order to pull the HT off unnoticed by family, friends, work colleagues, etc.

Down time is a pain to organise, every HT veteran will tell you that. But it is definitely an element of the whole HT procedure you need to consider when embarking on your HT journey.
Duration and size of the session will make a difference; smaller sessions can get away with a shorter down time period compared to larger session sizes.

Many guys heal up with no real evidence of surgery in as little as 10 days and some can still have lingering redness for prolonged periods of time - especially fair skinned patients. There is also the consideration of the shaved recipient areas growing back to a buzz cut length.

Some of the concealing products such as Couvré, can help to cover up the evidence of surgery but they shouldn’t be used on wounds that have not healed over because of the risk of infection.

The oft-asked question, ‘How much down time do I need?’ is an impossible one to answer but I recommend that you give yourself as much time as possible; a MINIMUM of two to three weeks, and ideally four to five (especially larger Strip sessions.)

If you can wear a hat to work then you are laughing and could literally be back to work within days if you wanted to, but for the vast majority wearing a hat at work is not an option and the appropriate amount of downtime post-op needs to be considered!

From all my HT sessions, never once have I been able to be back at work within two weeks and I know all the tricks. I’ve listed these in the Tips section at the end of the book.

**Aiding healing: what to do and not to do after the op**

It’s very easy when you are thinking about getting an HT to focus all your attention on the procedure itself and the end result. To get the best end result though, you need to also consider the journey post-op, particularly how you can help yourself to heal.
You will be given a set of instructions or guidelines to follow after the op. Follow them to the letter, especially for a first HT. They are there for a reason. Read over the written instructions for post-operative care several times, especially in the days post-op. This is very important because some of the vital details may be forgotten with the excitement of the surgery, and also with the sedation you may have received that can cause the fine points to be a little ‘fuzzy’.

Pain medications will be prescribed but it is unlikely that these will be needed for more than one or two days at the most. Sleeping medication may also be used for the first couple of nights, if needed. You may also be given medication to prevent swelling; sleeping with the head elevated on pillows for the first week will also help prevent this. It’s normal for the donor and recipient areas to swell a little after surgery as any wound does.

Regular washing of the hair is important. There is a tendency to think that this will disturb the grafts; but if it is done as recommended, the chance of dislodging a graft is remote. Shampooing helps remove dirt, blood and oil, and will gently dislodge the scabs that form over the recipient sites. These scabs should normally be gone within a few days to a week at the most. If they are not, you may not be shampooing effectively enough.

Proper hygiene also helps prevent infection and promotes the normal shedding of the transplanted hairs that occurs before they begin their new, relocated growth phase. Yes, I did say that there is normal shedding of transplanted hairs – more on that in the ‘shedding and growth times’ section later in this chapter.

Keeping the recipient and donor areas moist promotes their healing. GraftCyte, Aloe Vera gel, Emu oil, distilled witch hazel solution or even a mild salt solution will all work. This will also decrease the tendency of healing tissues to
itch. This is more important than it sounds. For the first few days, you may experience significant itching in the donor and recipient areas.

*Gently* scratching the donor site in the back will cause little trauma; it is beneficial to keep the donor incision free from debris, scabs and any accumulation of dirt and ointment. The recipient area, on the other hand, is a different matter. Keep your scratchy fingers off this! It is the most susceptible to trauma during the first three or four days, which is also the time when it may itch the most!

Keeping the area moist is the single most important factor in soothing and preventing the itching sensation. Vigorous rubbing and especially scratching with the fingernails can easily dislodge grafts, which may cause mild bleeding; more importantly, you may lose one or more of those valuable replaced follicles.

The donor area is a much larger incision than the tiny slits in the recipient area, therefore it is often a bit more inflamed. Sutures or staples may also cause some degree of inflammatory reaction. You may get mild swelling and discomfort.

Also, there will be an initial swelling and soreness from the surgical trauma of removing the donor strip. The discomfort and associated numbness usually decreases rapidly over the first three to four days; most of the soreness is gone at one week; but the numbness may persist for several months. In the latter case, the numbness gradually decreases as the nerves grow back until it is unnoticeable.

**What to expect – shedding and growth**

*Post-op shedding*

One of the most misunderstood aspects of FUT is the shedding of the new hair. Many patients either aren’t told, or they become temporarily deaf at that point,
that the majority of the newly transplanted hairs will fall out, in a process known as anagen effluvium, within the first three to eight weeks. Often this happens in a wave at about week three to four.

This is perfectly normal and to be expected for 90 per cent of the FUT grafts. They return from about three to six months post-op. Initially, they emerge as finer hairs, gaining length and diameter as their growth continues. By the end of the first year, the ‘new’ hairs should be as robust as the other, ‘native’ terminal hairs. They will also gain length at the same rate as non-transplanted hairs, which is roughly half an inch per month.

Sometimes during this first month, you may notice small hairs being shed along with their bulbs. They may even come out along with the small scabs within the first week or two. All this is normal; the part of the follicle which germinates new hair is still inside at the base of the follicle. Unless there is bleeding at a graft site, you haven’t lost the graft.

Occasionally there is some textural change in the transplanted hair. It may become curlier than it was, or even somewhat wiry. This change in texture is temporary and resolves itself with the normal growth cycles of the hair, often in 12 to 18 months.

*Seasonal shedding*

*Seasonal shedding* also becomes more significant when you’ve had a hair transplant. It is something that you need to be well aware of so that when it’s your time and it occurs, you do not panic and start organising your next HT in a desperate attempt to regain your ‘density’.

Shedding unfortunately is part and parcel of the HT process. Seasonal shedding happens to us all. I personally experienced a shed recently which left my hair looking very thin; even though I knew it was only a shed it still made me
anxious and very self-conscious – it does every time. BUT I know through experience it is the periodic ‘shedding process’ and that given time it will slowly but surely come back in. Yes, a waiting game …yet again! (See ‘Patience!’ later in this chapter!)

When it does occur, just ride it out and try your very best not to scrutinise it by watching it, applying products, washing it, conditioning it, washing it again ;-) 

Also when you shed and then it returns…remember for the next time in order to limit the anxiety levels associated with it.

You need to be aware that HTs, when they shed, do expose the fact that they perform the ‘art of illusion’. Transplanted hair is not dense, like a ‘normal’ head of hair - but can give the illusion of density with skilled placement performed appropriately with accurate direction and correct use of your hair characteristics. HTs appear thicker than they actually are – until a dreaded shed.

When you shed say 25 per cent, if not more, in a ‘shed cycle’ it makes the HT area appear thin in comparison to pre-shed. This is when the panic and anxiety set in. I have experienced many sheds and it still unnerves me most times. Best advice I can give is be patient (again) and it will all come back in over time - often three to four months. Consider taking MSM, if you are not already, just to help things along. Help the overall health of your hair with relevant hair vitamins (see www.spexhair.com products section for a reliable source).

DO NOT start applying Minoxodil or Nizoral shampoo (if you are not a regular applier) to boost growth. Big NO NO!! It may only shed more. The best thing you can do is focus on something else to take your mind off it; it will come back in much quicker if you do.
Post-op growth

You will scrutinise your results constantly, inspecting them every chance you get, and feel that you will always want more hair. Even at months five to seven patients are planning their second session, but my advice is WAIT and allow for the first session to reach its maximum potential at around 12 to 18 months.

It doesn't matter how many times I say it to people, or write it, they still feel that their growth has stopped at month four, five, six, then come month 10, 11, 12 they say ‘Wow you were right... I did get more’.

Growth doesn't stop - it can take up to 18 months to reach the max potential from your HT, so why guys are convinced after five months their growth has stopped is just beyond me. If you have received your HT from one of the reputable clinics around today, then your growth will continue along with a great deal of maturing.

You the HT recipient will not see the growth just occur; it takes months for the realisation to kick in. It is important to take pictures at monthly intervals to clearly see the progression.

I’m going to reiterate this: eight to 18 months is an important time frame when the growth becomes more noticeable. You will not get the full result from your HT until at least 12 to 18 months!

I think everyone needs to be made aware that even after a whole year there is still a great deal more in store, i.e. thickening and maturing and further development in general.

It’s important that you realise that HTs are a long-term commitment and you will always want to refine your hair and wish it were thicker/fuller/denser - this is the nature of hair.
'Will I only need one HT session?'

The answer to this is more than likely NO! It’s very rare that any patient only has one session unless they have a very small amount of loss, or limited donor supply, in which case you may not be a viable HT candidate.

Even if your hair loss is absolutely stable and doesn't progress any further, the chances are your first session will be the foundation for a potential second session to top up, refine, add density, close angles or work further back, etc, regardless of the technique used. Hair is like money – you always want more. You will always want to make it better, we ALL do!

Top surgeons will always endeavour to achieve the highest number of grafts, in order to create as much coverage and density as possible in one session, where warranted, whilst maintaining your donor area’s supply for the longer term.

Post-op blues

It is very common after your HT to feel down and anxious about the entire thing – remember you will be exhausted! You will be full of mixed emotions and this is often fuelled by the tiredness that you will underestimate. Undergoing surgery is a huge step mentally as well as physically. The lead up to it is mentally gruelling. Be aware that post-op the wheels will well and truly fall off at some point; you are only human!

You will turn up to your session shattered as most do, due to a few restless nights’ sleep on the lead-up to the big day and very little sleep the night before. Tiredness combined with anxiety and adrenaline is a crazy combo! Trust me – been there!

The surgery itself, Strip or FUE, is like running a marathon for you even though you are sat in a chair all day. Sitting in a chair ALL day doing nothing is tiring.
Combine this mental and physical exhaustion with the duration of the surgery - it can be very tough on you!

On top of these factors are also the drugs taken to help calm you down and the various pain killers needed post-op. Your body is getting hit from all angles and is just running on adrenaline for some time post-op. Combine all this, as many do, with several hours of flying and jet lag and you’ve got a hot bed for the blues! And these blues can strike at any time! Do not underestimate it!

After all this, you return home and then the sheer exhaustion hits you like a sledge hammer! Due to your new level of complete exhaustion this is when the blues are well known to creep in. You are tired like nothing before and then thoughts start to get amplified. You will start questioning the surgery and your doctor and how it went and was it a success. You become VERY paranoid and sketchy – obsessive even!!!! It’s the come-down of all come-downs so be prepared!

Be aware too that for a few days pre-op and a few days post-op you need to respect the surgery and what you are about to and have put your body through mentally and physically. Get some rest – your body needs it.

Rest up, drink lots and lots of water, eat well, chill out (watch all those boxed sets you have lurking in the cupboard). Try not to focus on the surgery and the various specifics surrounding it. Leave that up to the doctor – that’s what you are paying him for and that’s why your several months of intensive research has led you to him. Your radar will click back in within a few days and everything will become a lot clearer. You will start to feel much more upbeat about it all and about the experience in general.
Patience!!!

Patience is the toughest part of the HT procedure but one of the most important ones. I truly know how tough the waiting game is. I have been there many, many times before!! Looking constantly in the mirror, inspecting it every opportunity, driving along staring in the rear view mirror (how I never crashed I don't know). Wondering why at exactly month 3/4 there is still no growth!! Frustrated why the redness hasn't calmed down when forum member X was back to work at 10 days with no worries.

The trick here is to understand that everyone is different in terms of recovery times, growth times, expectations, realisation period, etc. Patience is an essential part of the HT journey and I think it needs more exposure. When embarking down the HT road – Be Patient!!

Just because ‘Joe Bloggs’ had great growth at month 3/4 doesn't necessarily mean you are going to. The growth will come in its own time and you will have your realisation in your own time. Be patient!! Could be six, could be 10 months.

It's a fact: three to four months post-HT is the toughest time in the entire process but you are only prolonging the agony by expecting to wake up one day around month 3/4 and see it all taking place. It doesn't happen like this!!! It is soooo sloooow and gradual that you actually do not see it happen. You will only see the transformation when you compare your pictures alongside each other at monthly intervals.

Be patient (I may have mentioned that already!). I know it’s tough, really tough!!! Inspecting your hair 24/7 is actually NOT going to make things happen any faster. In fact it will make things happen more slowly – a watched kettle never boils! Be prepared post-op to really make a conscious effort to put it all on the back burner for six months as a benchmark; otherwise you will only
drive yourself MAD! I speak from personal experience!! One final word on this issue – *be patient*!

Finally in this chapter we must consider the limitations of surgery. There are limitations and you need to be aware of them before you set off on your own HT journey.

**Limitations and downsides to surgery**

Every top doctor sets out to help you achieve the best possible result by the best method. However surgery can, due to the ‘unknown’, result in failure. Surgeons are not God. There is NO guarantee. It’s rare, but not unheard of, for an HT surgery to fail due to the various physiological variables YOU bring to the table: hair loss pattern, further loss, hair characteristics, blood supply, laxity, previous surgery, etc.

Some surgeries don’t turn out as planned e.g. low yield and stretched or widened scars even in the best of hands. It’s just one of the risks of surgery. Every TOP clinic will admit this and won’t lie to you; however, they will use all their experience and skill to achieve the best possible result for YOU, with what you bring to the table.

Scars can stretch, yield can be low, numbness can remain, shock loss can be permanent. You need to know this so you are aware of the risks. A good article on this is here [http://hairloss.iahrs.org/hair-transplant/possible-hair-transplant-surgery-complications/](http://hairloss.iahrs.org/hair-transplant/possible-hair-transplant-surgery-complications/)

So if I haven’t put you off completely, (and it’s a good thing if I have because as I have said many times, this is a long term, long haul decision), then let’s consider in the next chapter how to find the right surgeon for you.
Finding the right doctor

Clearly the best place to start your search for the right doctor for you is with the list of recommended doctors at the end of this chapter. These are the guys I would trust with my head and who I know do good work. You still need to do your own research on them to find out who is right for you. You are going to be putting your head into their hands and the quality of their work on you as an individual is going to be affected by the relationship you have with them as well as the physical attributes you bring (as we discussed in the last chapter). He might be a great surgeon but you’ve got to like the guy too – you’ll be spending many hours together and if you’re uptight during the procedure it will create all sorts of problems. You need to feel you can trust this doctor implicitly, with your life – because actually you are entrusting your life to him both physically (your ‘look’) and emotionally (your self-esteem and confidence).

A good doctor will make sure that you are making informed choices and understand the long-term implications of any treatment option, including surgery, particularly when you are in a vulnerable emotional state. He may (and should) slow down the decision-making process through multiple consultations. He should allow you to reflect on the situation and the decisions involved and should never rush to operate. If you ever feel that you are being rushed or pressed into making a decision, walk away and take the time you need to make that decision.

When you book the consultation, ask whether you can record the entire consultation to refer back to. You will forget things he said so if you have a recording you can refer back to it. If the answer is no, then go elsewhere. Bona fide doctors will be happy for you to record the consultations.
There are some basic things you should check out:

- The doctor/clinic’s experience, training and credentials
- The way in which they practise – how does their clinic ‘work’?
- Whether you ‘gel’ with them; do you feel comfortable with them?

You should also contact their past patients and ask for their feedback. I’ll cover this in more detail shortly.

Here are some of the questions you should ask. This list is not exhaustive and there may be other questions you have. Make sure you ask them and never allow yourself to be brushed off with an insufficient answer. The best doctors will take all the time you need to explain what you need to know, answer the questions you have and put you at your ease.

*I’m going to refer to doctors as ‘he’ throughout, because most are male, but that doesn’t mean there are no female doctors, and there are certainly female technicians.*

At the end of this chapter there is a checklist for you to use. Feel free to print it out and take it with you to your consultation – it doesn’t cover all the questions in full though, so make sure you read the following sections carefully before using it.

**Finding out about their experience**

This is the minimum you need to know:

Does the doctor specifically work with the Single Follicle Unit Transplantation system, i.e. does he use Strip or FUE methods for harvesting and only transplant single follicular units as standard in his practice?
How long has he been doing surgical hair restoration/transplantation procedures?

How many HT procedures using the FUT system has he done?

How many HT procedures does he currently do per month? A busy practice may indicate that this doctor is skilled and well respected by patients. It may also mean he is cheap and his patients aren’t aware that they are being short-changed.

Is hair restoration surgery his only work, or does he perform other types of cosmetic surgery? Ideally I would only use a doctor that specialises in HT work. The clinic may offer other procedures, but you want to go with the doc in that clinic that only does HTs. If they do offer other work, you might also want to check that they have invested sufficiently in the state of the art equipment for gold standard HT procedures.

What type of donor closure does he use? Does he use sutures or staples and why does he use his chosen technique?

What type and size of instruments does he use to make recipient incisions? Is he experienced in and specifically using the Lateral Slit technique?

How many hair transplant technicians are employed with their clinic? What is the length of time each hair technician has worked for the clinic? How many technicians will be assigned to you and be exclusively working on your procedure while it’s in operation? You need a team dedicated to working with you and only you for the duration of your HT procedure.

You could also ask:

- Are the grafts microscopically dissected? (They should be)
- Do all the technicians use stereo-microscopes? (They should do)
• How long have the technicians been using microscopes to dissect follicular units?
• How many stereo-microscopes are being used during a procedure?

Any hedging on these questions will give you a good indication that this might not be the clinic for you.

Will he provide names of patients who are willing to be references for him? If he isn’t happy to do this on request, go elsewhere.

Ask to see his portfolio of before and after photos to be sure you like the aesthetic quality of the doctor’s work. He should be able to show you a minimum of 10 sets of photos.

The doctor’s training and credentials

When and from where did he obtain his medical degree?

When was he licensed to practice medicine? Is he licensed to practice medicine in the state or country in which the treatment will take place?

Where did he complete his general medical training?

Where and with whom did he train to be a hair restoration surgeon? When did he qualify?

Is he a certified medical or surgical specialist? Specialist standing is not essential but it is an indication that he has undergone advanced training and takes his work seriously.

Is he a member of the International Alliance of Hair Restoration Surgeons? This is important. If he isn’t, don’t use him.
Does he belong to any other professional bodies? Is he rated by his peers, for example does he speak at conferences, do research, further the science of hair restoration?

**How does his clinic operate?**

Is he a solo practitioner or are there other surgeons in the same practice?

If there are other surgeons, will you have the same one from beginning to end of your treatment? If not, how would you feel about this? My preference would always be to work with the same doc throughout the whole procedure.

Are the office staff helpful, considerate and willing to answer any questions you have?

Are the office and clinic neat and clean? A messy office may not be an indication of a doctor’s competence but it does not make a good impression. A dirty office should be avoided!

Did you feel pressured to make a decision by anyone at the office or clinic before you were ready? This would be a cause for concern. You should take all the time you need before scheduling surgery.

**Your comfort level**

Your trust in your doctor is critical and it as much a matter of gut feeling and a sense of comfort with him as it is his knowledge, training and experience. ALWAYS try to meet with the doctor in person before making any decisions about choosing him to do your HT. Sometimes you will meet with a ‘consultant’. He may be able to give you lots of information but he is not
usually medically trained and cannot assess your suitability. Don’t ever be fobbed off with the idea that meeting the ‘consultant’ is enough – it isn’t.

You should be encouraged by the clinic to have a spouse or friend present during your first consultation. The presence of a spouse or friend will help you to be more relaxed, and they can be the guardian of the list of questions to make sure you remember to ask them all! This is a really emotional time, remember, and you will forget things you need to know.

You should have a lot of questions to ask at the first consultation and take a written list with you to make sure there are none you forget to ask, especially if you are going alone. Check you are satisfied that the doctor listened to all of your questions, answered them to your satisfaction and discussed the options.

You need to consider the following during that first consultation:

Do you feel that he spent enough time with you? Did he adequately explain all the steps necessary in examination and diagnosis? Did he discuss all the possible approaches to treatment after the results of his examination and diagnosis? Make sure you have a clear understanding of what can be accomplished for your unique situation.

Was he willing to discuss all treatment options and their costs?

Do you feel you have a good plan for your hair restoration, both now and longer term should you need work done in the future (see next section)?

At the end of the initial consultation, do you feel comfortable that you would let this doc loose on your head with a knife?
Questions about your specific situation

Make sure you tell the doc your desired outcome with a hair transplant, your long term goal and your expectations. Make sure you discuss YOUR exact goals (hairline, temples, forelock, crown, hair density, hair coverage, etc). He should ask you about this and discuss it in detail with you.

Ask if your goals are reasonable and if they can be met with your hair characteristics.

Ask if you are a good candidate for hair restoration and ask him to explain why? (You should have an indication of this from chapter 5, at least enough to know if the doc is telling you the truth or bending it). Ask to see similar comparisons.

Ask about the state of your donor region and how many grafts the doc thinks can be safely harvested in one session and via multiple surgeries.

Ask for an estimate of how many grafts you require now and also how many are likely to be required in the future based on your goal.

Ask for an assessment of your donor laxity and how you can improve this prior to surgery IF required.

Establish how suitable you are for a HT in his opinion.

Very importantly ask if you can meet or talk to previous patients in similar circumstances to yourself. (This is in addition to seeing photos of their work generally). Also ask to see testimonials and plenty of photos of similar patients. Ask about all costs involved e.g. price of consultations (if applicable), amounts per graft and additional aftercare, medications, etc as most clinics vary to some degree and it’s good to know exactly where you stand!
Ask how long their waiting list is (it can be a good sign as to how good they are but don’t rely on that).

Discuss medications such as Propecia to help prevent further loss. Ask if they can prescribe such medication.

Ask about pre-op and post-op instructions and ask for a hard copy of these.

Ask about your future hair loss pattern. How accurately can the doctor predict what might happen in the future?

Ask if he has had any HT surgery himself and whether he is taking any hair loss medications?

**Meeting other patients**

I have offered myself for years and organised numerous ‘meets’ around the world, precisely because it is so important that you can meet other patients. There is just no better way to evaluate a doctor’s work than to see it up close and in person. Good pictures are beneficial, but pictures can be altered or patients can be photographed in ways that really don’t reflect the whole truth. When you meet a patient, however, you can look at him from every angle and you can inspect his hair like a monkey! It’s best if you can meet with someone who has had a similar transplant to the one you’re considering. Your doctor should be able to put you in touch with someone who is willing and able to show you his results.
Planning for Possible Future Hair Loss

One of the critical things your doctor should also discuss in your consultation is anticipated future hair loss. Unfortunately, hair doesn’t stop thinning just because you’ve had a transplant. Reconstruction work must take into account what may happen in the future – even years into the future. Your doctor should develop a master plan to anticipate any future hair loss and future surgery. The plan may include drugs like Propecia if you aren’t already on it.

The master plan should include short-term and long-term solutions. You always hope that the worst-case plan will never be realised, but it’s essential to include this possibility in your understanding and expectations of your procedure.

You should discuss with your doctor:

- What’s the worst-case scenario for hair loss in your lifetime?
- Will there be enough donor hair to replace future hair loss?
- Will you be able to afford all that’s necessary in the future? The doctor’s honest description of possible future needs is crucial to your making an informed, smart decision.
- Are you fully informed about every aspect of the reconstruction process?

Red rags to the bull

If any of these come up in your consultation, then depart as fast as your legs will carry you:

‘We just had a cancellation and we can see you next week.’ It might be true, but if they have no waiting list and can squeeze you in that quickly, it’s a worry!
Discounts and/or special deals: the good guys don’t need to offer discounts or deals to get you through the door. If they are offering deals, don’t touch them. They might be open to your offer of a deal, but that is a different matter.

If they can’t show you results, testimonials or before and after photos of their patients, then leave.

If they can’t give you names of their patients who you can speak to and meet in person, also leave. Or if patients aren’t ‘available’ to meet you, then smell a rat.

If they have a small number of staff, or you can’t see the doctor himself for whatever reason, then don’t use that clinic.

A list of recommended doctors follows.

**Recommended doctors**

I have met hundreds of patients from all over the world over the last 10 years and during this time come across some very good hair transplants (also a lot of bad ones). Based on meeting and interacting with all these patients, I have compiled a list of clinics and doctors that I would trust my own head with for HT surgery. There are other clinics out there who offer good work but the list compiled below is based on patients I have actually met.

Dr Feller  
[www.fellermedical.com](http://www.fellermedical.com)

Dr Hasson  
[www.hassonandwong.com](http://www.hassonandwong.com)

Dr Wong  
[www.hassonandwong.com](http://www.hassonandwong.com)

Dr R. Shapiro  
[www.shapiromedical.com](http://www.shapiromedical.com)

Dr Gabel  
[www.gabelcenter.com](http://www.gabelcenter.com)
Dr Alexander  www.biltmoresurgical.com
Dr Rahal  www.rahalhairtransplant.com
Dr Charles  www.foundhair.com/drcharles.html
Dr Lindsey  www.lindseymedical.com
Dr Bernstein  www.bernsteinmedical.com
Dr True  www.truedorin.com
Dr Farjo  www.farjo.net
Dr Devroye  www.hairtransplantsurgery.com
Dr C Bisanga  www.bhrclinic.com
Good Doc Checklist
This is for you to check that you have covered all the questions you need to ask. Remember to record the entire consultation.

About the doctor's experience
- Methods of harvesting used:
  - Strip
  - FUE
- Single follicle unit transplant into recipient area?
- How long has he been doing hair restoration/transplantation procedures?
- How many HT procedures using FUT has he done?
- How many HT procedures does he currently do per month?
- Is hair restoration surgery his only work or does he perform other types of cosmetic surgery?
- What type of donor closure? Does he use sutures or staples?
- Why does he use his chosen technique?
- Type and size of instruments used to make recipient incisions?
- Experienced in using the Lateral Slit technique?
- How many hair transplant technicians are employed with their clinic?
- What is the length of time each hair technician has worked for the clinic?
- How many technicians will be assigned to you and be exclusively working on your procedure while it’s in operation?
- Are the grafts microscopically dissected? (They should be)
- Do all the technicians use stereo-microscopes? (They should do)
- How long have the technicians been using microscopes to dissect follicular units?
- How many stereo-microscopes are being used during a procedure?
- Names of patients who are willing to be references for him?
- Can he show a portfolio of before and after photos?
The doctor's training and credentials

☐ When and from where did he obtain his medical degree?
☐ When was he licensed to practice medicine?
☐ Is he licensed to practice medicine in the state or country in which the treatment will take place?
☐ Where did he complete his general medical training?
☐ Where and with whom did he train to be a hair restoration surgeon?
☐ When did he qualify?
☐ Is he a certified medical or surgical specialist?
☐ Member of the International Alliance of Hair Restoration Surgeons? This is important.
☐ Does he belong to any other professional bodies?
☐ Is he rated by his peers?

How does his practice work?

☐ Is he a solo practitioner?
☐ If there are other surgeons, will you have the same one from beginning to end of your treatment?
☐ Are the office staff helpful, considerate and willing to answer any questions you have?
☐ Are the office and clinic neat, and especially are they clean?
☐ Did you feel pressured to make a decision by anyone at the office or clinic before you were ready?

Your comfort level

☐ Consent to have a spouse or friend present during your first consultation?
☐ Are you satisfied that the doctor listened to all of your questions, answered them to your satisfaction and discussed the options?
☐ Do you feel that he spent enough time with you?
Did he adequately explain all the steps necessary in examination and diagnosis?
Did he discuss all the possible approaches to treatment after the results of his examination and diagnosis?
Do you have a clear understanding of what can be accomplished for your unique situation?
Was he willing to discuss all treatment options and their costs?
Do you feel you have a good plan for your hair restoration, both now and longer term?
Do you feel comfortable that you would let this doc loose on your head with a knife?

**Questions about your specific situation**

- Have you discussed YOUR exact goals (hairline, temples, forelock, crown, hair density, hair coverage, etc)?
- Are your goals reasonable and can they be met with your hair characteristics?
- Are you a good candidate for hair restoration?
- Did he explain why?
- Did he show you similar comparisons?
- Did he explain the state of your donor region?
- Do you know how many grafts the doc thinks can be safely harvested in one session and via multiple surgeries?
- Do you have an estimate of how many grafts you require now and also how many are likely to be required in the future based on your goal?
- Do you understand your donor laxity and how you can improve this prior to surgery IF required?
- Are you suitable for a HT in their opinion?
☐ Have you got details of previous patients in similar circumstances to yours that you can meet?
☐ Were you shown testimonials and plenty of photos?
☐ Were you made aware of about all costs involved e.g. prices of consultations (if applicable), amounts per graft and additional aftercare, medications, etc?
☐ Can you get a reduced fee for cash or short notice surgery?
☐ How long is their waiting list?
☐ Did you discuss medications such as Propecia to help prevent further loss?
☐ Can they prescribe medications?
☐ Were you given hard copies of pre-op and post-op instructions?
☐ How accurately can the doctor predict your future hair loss pattern?
☐ Has he had any HT surgery? Is he taking hair loss meds himself?
☐ What’s the worst-case scenario for hair loss in your lifetime?
☐ Will there be enough donor hair to replace future hair loss?
☐ Will you be able to afford all that’s necessary in the future?
☐ Do you feel fully informed about every aspect of the reconstruction process?

You might want to add your own questions here:

Information sources – for full references see Appendix 1:
International Alliance of Hair Restoration Surgeons, American Hair Loss Association, Hair Loss and Replacement for Dummies (book), tips from forum posts
Tips to help you through your hair transplant operation

If you’ve read this far, I’m presuming you’ve definitely decided to investigate having an HT. So once you’ve made your decision and chosen your doc, print these out and make them your bible!! These tips are an amalgamation of my experience and the experience of other HT veterans. You will find loads of good advice on the forums as well, and as I collate more tips you’ll find them on my website www.spexhair.com

Choosing your clinic

In the last chapter we looked at all the things you need to know about choosing your actual doctor. One additional tip is this: Don’t ever let geography or money determine where you get your HT done.

Think long-term, not short-term. Too many (and I have met hundreds) jumped into HTs and chose the local or cheap ‘special offer’, and as a result got themselves into very unfortunate situations. If you do not research your HT doctor well, you will end up paying for it in more ways than one.

There is a reason why many of us travel overseas, particularly to the US, so don’t make your decision on who is the closest or cheapest. No one said getting a HT was easy but if you choose the right doctor for you (regardless of their geographical location) you’ll end up getting a HT that you can be proud of rather than having to live under a hat before you can get repaired. That’s a lengthy, expensive, emotional, traumatic experience and one we see too often. It can be avoided by enduring a few hours on a plane.
**In the run up to surgery:**

These are things to do in the three to four weeks preceding your op.

- Sort out your story as to why you are going away for two, three or four weeks. Make sure you have made your story clear to those that need to know.

- Avoid all alcohol, all vitamins, Minoxodil and MSM for SEVEN days pre-op, as well as protein shakes and power-food bars which have added vitamins. These can all thin the blood and stop it from clotting normally for surgery.

- Avoid aspirin, Motrin, Naprasyn, ibuprofen and all other non-steroidal anti-inflammatories for at least a week. Tylenol is OK.

- Buzz hair short pre-op in advance so people you see on a day to day basis don't notice the new buzz cut post-op (especially FUE guys).

- If you are going to get a zero per cent credit card to pay for your op, sign up the month before the procedure, not the month after. They don't like a 10K balance transfer and may not give you a high enough limit.

**On the way:**

These are the things to pack and do in the last two or three days before your surgery and when you get to your destination.

- Take two loose hats with you (one might not fit). Or use a bandana – it’s more comfortable than the baseball hat and covers more of the head.

- Take a travel pillow – very handy, especially on the journey home.

- Take a MP3, IPOD or CD player.

- Get to bed early the night before. Aided sleep is advisable.
• Get a massage the day before. If you are in New York City there are loads of places down in China Town. Elsewhere, ask the clinic’s receptionist – they usually know of the good places.
• Stay local to the HT clinic.
• Make damned sure you've filled your Vicodin prescription well in advance of your op, as opposed to waiting until the night before because you aren’t guaranteed an all-night pharmacy – not even in major cities like New York or London.
• Read the post-op instructions before you have the HT. Write down any key questions and tick them off before you leave the surgery. It’s easy to forget to ask, what with the injections, etc.

On the day of surgery:
• Eat a small breakfast on your surgery day but avoid caffeinated coffee.
• If you are on medication for any medical condition continue to take it on the day of the surgery unless your doctor has told you otherwise. Make sure your doc is aware of any medication you are taking prior to surgery day; in any case he should ask you as part of the consultation process.
• Get to the clinic early in order to not be rushed, as this will allow you ample time to go through everything with the doc.
• Have a list of questions for the doc that you want answering.
• Wear a buttoned-up shirt for the day of surgery – it’s easy to get on and off. In fact it’s best to wear button-up shirts for a few days to avoid pulling clothes on and off over your newly-transplanted head.
• Wash hair the morning of the surgery and wear lots of deodorant. It’s a long sweaty day and you don't want to be stinking out the place, nor
giving yourself any extra anxieties because you are worrying about your perspiration.

- I would advise taking the pain killers regularly, even before the pain starts – but check with your doc which ones are ok/best to use.
- Have the clinic take lots of pre-op pics in order to have a controlled comparison for post-op.
- Do not watch comedy DVDs during the procedure; this can result in you laughing and moving your head at the wrong time!

**Immediately after surgery:**

- Have the doc wash your hair the day after surgery...it reduces scabbing and you won't spend the next two weeks looking in the mirror waiting for them to fall off. He’ll also show you how to wash it properly to help reduce scabbing without damaging your donor and recipient areas.
- Never underestimate the recovery time needed. Get the absolute maximum amount of time off work. You will feel fine after a couple of days but you will look terrible. It's not so bad if you can wear a loose cap or bandana.
- Remove all mirrors from your house, office, etc. Seriously! And avoid staring at yourself in your car mirrors – especially when driving. The transplant will not grow any faster for looking at it and initially it looks pretty unattractive.
- Sleep upright or at a 45 degree angle to help any swelling go down.
- Apply huge amounts of Aloe Vera gel to both donor and recipient area but not until five days after surgery (then twice a day minimum).
- Apply Emu oil or distilled witch hazel to the healing areas to help soothe and speed up healing process; (apply from seven/eight days post-op). Distilled witch hazel helps with redness.
• Take MSM (3000mg) to speed up the existing hairs growth.
• Drink lots of water / fluids.
• Bend at the knees for first three/four days.
• For the first three/four days, just put shampoo in a cup and pour it over the recipient and donor area. Then build up to a shower but shield your recipient area with your hand and dab on shampoo.
• Have a couple of beers and soak your head in a hot bath prior to staple removal (usually about ten days postop).
• Rest as much as possible.
• No physical activity for ten days then build it up slowly.

From two weeks post-op:

• Figure out your communications strategy for when you are home. I decided to tell people on a need-to-know basis which meant that I told only a few.
• Stop staring in the mirror all the time.
• Start up physical exercise gradually.
• Start Minoxidil if you want to help speed up growth.
• Stop inspecting scar/ donor area all the time! It takes months to fade.
• Forget about your HT now for at least four/five months.
• Take some clear photos to compare your situation at various stages.
• Use sun screen on the graft for the first four months if the weather is warm and sunny. If you get too much exposure you could peel really badly and have redness for months.
• Use concealers in areas once hair is long enough to help bulk up and disguise lingering redness.
• Wear a hat to buy you valuable days.
• Grow hair long pre-op to help disguise areas worked on.
• Take a holiday post-op and take yourself out the loop for three to four weeks
• Take sick leave right before your holiday comes to a close to buy you valuable days.

**Travel Tips for the HT traveller:**
Over the many years that I travelled for my HTs and in helping others who have chosen to hop on a plane overseas, I have learned a few tricks of the trade to make travelling as easy and as problem-free as possible. It’s a daunting task getting an HT, never mind travelling thousands of miles and also across different time zones, so hopefully the tips below will help the many who intend to venture overseas to their chosen clinic.

**Outbound:**
1. Keep well hydrated at all times. Drink as much water as you can as travelling can dehydrate you making you feel over tired at the other end. Avoid alcohol!
2. Get a massage the day before.
3. It’s a long day from start to finish before you get to your hotel so travel in something comfortable in order to make the journey more enjoyable.
4. Make sure you have all documents in order a few days before:
   - Passport is up to date and has appropriate time still left on it (minimum 6 months)
   - Flight info/ tickets are ready (checking in online is always a good idea as it eliminates stress at airport)
   - Additional passenger info all filled in online (airline requires this)
✓ Your online visa filled in [http://www.unitedstatesvisas.us/system.html](http://www.unitedstatesvisas.us/system.html)
✓ Travel money - (always good to have $ in your wallet for taxis, food, drinks, etc)
✓ Hotel info to hand when you arrive to give to taxi driver

6. Travel with good time to spare – go at least one day before and schedule the flight so you get the opportunity of a good night sleep the night pre op.

7. Stay local to the clinic so that you can easily get there from the hotel and in good time. If you can make time, do a recce the night before so you know exactly where the clinic is. Often you need be there early, i.e. 7.30am, particularly if it’s a longer op.

8. On entering the US /Canada you will be asked for the reason of travel - simply inform them ‘leisure’ as this will save a great deal of time at customs.

9. Travel light if possible. If returning home within a few days then try to only use hand luggage. It saves a great deal of time waiting around in the baggage collection area. After several hours on a plane you will just want to hit the shower at the hotel.

10. Travel accessories to help pass the time: a couple of books, charged iPod or iPhone, magazines – anything to kill an hour or two.

11. The best airline in my opinion is Virgin so if you have a choice fly with them; their 1000+ movies, large seats, free food and drinks make the journey much shorter ;-) 

**Return:**

1. Make sure going through customs nothing on you is going to bleep – i.e. belt, money, phone, rings. This way you will sail through the security without having to remove your hat. Bleep and your hat will possibly have to be removed. If this...
happens, just inform the guard you have just had ‘head surgery’ and you are more than happy to remove the hat but request a private room. You will more than likely just be asked to move on ;-)  

2. Take a travel pillow - very handy.  

3. Drink lots of water. Keep well hydrated all the time.  

4. Ideally get a night flight home. Because you fly through the night, you will sleep on the plane and arrive home in the morning, so your body clock will adjust better. (This applies mostly to UK/US travellers.)  

5. Travel in comfortable clothes e.g. tracksuit.  

6. Ask your doc for a sleep aid, then the flight home will be a breeze once you are on the plane ;-)  

7. Get picked up from airport at home so that there is a friendly face once you touch down and you do not then have to drive on top of the journey.  

8. Stay rested all day on return but try stay up till late afternoon /early evening. This way you will get your body clock back in line very quickly. It might require a little bit of fighting but well worth it.  

9. Be aware that the travelling can be a mission anyway, even without the HT on top, so keep rested and be aware of the post-op blues once home. You will be tired both emotionally and physically so respect it and rest up.  

_Travel Tip from another HT vet_  
My tip to anyone travelling long distances is to fly home the day after surgery! At one day post-op I had no swelling and no pain because my head was still totally numb! I flew home four days post-op and my head looked like a balloon and the anaesthetic was beginning to wear off, which made for a long and
uncomfortable flight home!!!!!

Airport Security

The best way to do it is to make sure there is nothing on you to slow down your smooth passage through security. Remove all items such as watch, keys, change, bangles, chains – anything that could cause a bleep.

As you walk through remove your cap casually and calmly. They will not specifically be looking at your head at all... you will be ultra-paranoid. They will maybe glance; once you’re through that vital 10 seconds, just casually pop the hat back on.

You will never ever see the security guy again so who cares if he suspects; and the people behind you will be too stressed out taking all their own crap off and sticking it into the machine for scanning.

Another alternative is you can always ask for a private room; but to be honest, it’s just not needed!

Other pre-op and post-op tips

Dr Feller’s pre-op tip for preparing the scalp for ‘Strip’ surgery

In order to ensure the best possible result it is often a good idea for the patient to stretch the scalp skin in the donor area for several weeks prior to their scheduled procedure. By clasping the hands together and placing them behind the head, push the heels of your hands into the back of the scalp while at the same time pushing upward. Hold the skin taut for the count of five, and then release. Repeat as many times as you can throughout the day. Likewise, take the heel of your hands and place them on the scalp over the ears. Push in while
pushing up. This will also stretch the skin so that when it comes time for your procedure your skin will be as supple as possible.’

**Post-op redness and healing time**

Post-op redness will occur both in the recipient area and the donor area. Redness in the recipient area occurs due to the presence of newly formed blood vessels and inflammation from the placement of the new grafts. Redness in the donor area occurs where the strip was removed and is basically a wound that will eventually heal.

For individuals with a higher degree of hair loss, the redness will be more apparent than for those who are able to partially camouflage the area with existing hairs.

The ‘down time’ while the redness goes and healing occurs can be long and drawn out and the recovery time can become somewhat depressing. I know that many struggle to be able to return to work/life without being detected within a couple of weeks. Concealers can help. Couvré is great to help mask the scar area and helps blend any contrast where hair has been shaved-down and the pinkness of the scar. Also Toppik, once it has a little hair to magnetise to, can really help bulk up the appearance of hair, making shaved-down areas which have some returning growth not as sparse.

It's honestly a case of trial and error; there is not hard and fast rule as to which one will work best and when but they can help most certainly in the early stages of the post-op recovery. Waiting a minimum of seven to 10 days is advisable before application as the scalp needs to heal. Be sure to wash off daily too so the head can breath and heal.

I think the best advice I can give guys looking into concealers is to test them out, if possible even before surgery, to get a feel for them and how to use them. Don't invest heavily in everything all at once. Experiment with small amounts
and testers and see how you get on. Also don't get frustrated if you don't get on with a product straight away. It takes time to work out the best way to apply the product to best suit you. You also need some hair there to help assist the product; don't expect miracles too soon.

**Scabbing and Shedding Grafts**

Once the grafts are placed into the recipient area, the grafts are held in by fibrin, produced by a chemical reaction in serum when the graft sites are made. Typically, the grafts will become fully secure by the eighth day. Scabs will begin to form the day after surgery.

If a scab falls out and there is a hair present in the scab, this is completely normal. As long as blood is not present and tissue does not appear around the hair, you can assume the graft is fine. Once the scabs have completely disappeared, you will have the appearance of a buzz cut. Within the next two to six weeks, these hairs will begin to shed and the recipient area will appear as it was prior to surgery. The grafts are merely in a resting phase and will begin their growth cycle in approximately three months.

This is when you will panic that the transplant hasn’t worked. It has. **Go back and read chapter seven – particularly the sections on shedding and patience!** Washing your hair as your doc has shown you will help the scabs come off and the wounds to heal more quickly.

**Staple/Sutures Removal**

The staples or sutures (depending on the surgeon’s technique) typically remain in place for approximately 10 days after surgery. Surgeons encourage you to come back to the clinic to have them removed, but will provide you with instructions for removing them should a visit to the surgeon not be possible.
Prior to having the staples removed or sutures removed (this tip is more applicable to staples), have a long shower and soak the donor area. When scabs are dry, there tends to be a tiny pinch when the staples are removed. Soaking the donor area will moisten the scabs and minimize any discomfort.

**Pimples**

Pimples can occur on the recipient area. This is normal. They may be a little sore to the touch as any pimple is, but there shouldn’t be any abnormal discomfort. If pimples do appear, they typically do so a month after surgery.

I have recommended Tea Tree oil to a couple of recent HT guys who have experienced little pimples post-op and it seems to have resolved things. Also a very hot flannel applied to the recipient area can help draw them out and resolve the problem.

**Hair greed!**

Hair greed is a killer, so be aware of it and its ability to creep up on you!! We all want more hair. Hair is like money, you always want more! I tell everyone I meet with straight out that, regardless of the size session you have, it’s inevitable you will want more. You will not necessarily need it but you will want it.

It’s important to remember that HTs are a LONG-TERM commitment. You will always want to refine your hair and wish it were thicker, fuller, denser, etc. This is the nature of hair. HTs are not a quick fix. Many clinics will tell you it can all be done in one session; but it rarely can, so be aware! Be aware also that your goals will change over time as well, which contributes greatly to your hair
greed. You initially only want a conservative session; once it’s grown in, you wish you’d had more and you will want more. If I had a £1 or a $1 for every time someone had said to me ‘I only intend to have the one session and that will be me done’, I would be rolling in it!

The more you have, the more you will want, especially once you have seen the results of good work (assuming you’ve chosen well on the doc front). I personally needed to have more work due to unsatisfactory results initially, but even after the repair work and the fine head of hair I now have, I still want more, even now! *This is why all the stuff I’ve rattled on about regarding getting the right doctor, respecting and managing your donor area, being clear about your goals and expectations, understanding your hair characteristics, being realistic and planning long term for future hair loss is so important.*

So there you have it: everything I know, that you need to know, about losing your hair and replacing it safely through hair transplant surgery. My last few tips for you are these:

Keep checking back on [www.spexhair.com](http://www.spexhair.com) – I’ll keep updating the website with more info and tips as I have them.

Use the forums. They are a great source of information and guidance. Pay particular attention to posts from the guys who clearly have plenty of experience and are positive in their outlook. They are easy to spot.

Even though I have tried to give you all my experience and knowledge in this book, you still need to do some research of your own. There are links from my website to good information sources and a list of good forums, references and resources follows in the appendix.
And finally: the best doctors aren’t cheap, but they cost you far less in the long run – in money, time and anguish. Good luck on your HT journey!
Appendix 1 References and resources

The following are all resources that I have used in my own research over the last 10 years. They are in no particular order of importance. They all have good information and are worth taking a look at. You will also find links to good information sources and articles on my website www.spexhair.com

Websites

www.baldingblog.com
www.hairlosshelp.com
www.stophairlosstown.com
www.thebaltruth.com
www.hairrestorationnetwork.com
www.hair-help.co.uk
www.hairlossstalk.com
www.hairlossadvance.com/
www.hairlossexperiences.com
www.fellermedical.com
www.hairlossinformation.com/
www.hairlosspatientguide.com
www.hairlossfight.com
www.regrowth.com
www.hairlosslibrary.com
www.hairtoday.com
www.hairlossdirect.com
www.americanhairloss.org
www.surviving-hairloss.com

http://www.hairtransplantinsider.com/index.php (pics from different docs)

http://hairtransplantblogger.com/about

http://www.iahrs.org/ (International Alliance of Hair Restoration Surgeons)

Forums

www.stophairlossnow.com

www.thebaldtruth.com/community

www.hairtransplantnetwork.com

www.hairlosshelp.com

www.americanhairloss.org

www.hairlossexperiences.com
Books

*The Bald Truth* – Spencer Kobren

*Hair Loss and Replacement for Dummies* – by William R. Rassman MD, Jae P. Pak MD, Eric Schweiger MD and Robert M. Bernstein MD
Appendix 2 Testimonials

I have included some testimonials here from other guys I have helped. This is basically so you know I am bona fide and that I walk my talk. Given that there are so many dishonest people in this industry, I wanted to give you comfort and evidence, if you need it, that I am not one of them. I am always as honest as I can be in my advice to others contemplating the HT route. I may not always say what you want to hear, but I will always tell you the truth as I see it.

While writing this book, I was also asked to contribute to a number of press articles and radio interviews, which you can read/hear about at http://spexhair.com/interviews-media-coverage/

‘Like most guys, I was quite apprehensive about having an HT or even taking the next steps towards it. The idea was great, but I had so many questions. I started to do the research, which is where I found Spex’s website. I contacted him and was impressed how helpful and friendly he was from the offset.

I caught up with him in Nottingham and went through everything. Firstly, Spex’s hair looks great and he gives you the chance to look up close and touch a real HT. What is amazing is you wouldn’t even be able to tell. The result speaks for itself.

Spex was brilliant in going through everything, his experiences, the procedure and letting me bombard him with questions. He has great insight into hair loss and really made me feel at ease. Spex gave great advice and has given me the confidence to have my HT.

I can’t thank Spex enough, I highly recommend meeting with him as part of your research.’

James
‘I have seen Spex participate in the various online hair loss communities over the years. He also has a heart for helping other hair loss sufferers, having gone through this journey himself. He has helped many, especially in the UK where talented HT surgeons are extremely rare.’

*Steve Gillen ‘Gillenator’, Independent Patient Advocate*

‘I first met Spex in March 2010. I had heard good things about him during my research and can understand exactly why. Any initial nerves were dispelled within minutes as he is just a typical down to earth guy who is very easy to talk to and very reassuring. We spoke for about an hour during which time I received some very impartial advice which was nothing like the sales pitches I and many others have endured in the past. To non-sufferers this may not mean much, but Spex talks into your eyes when talking to you, not your hairline. Very refreshing, and an obvious sign of somebody who has been there. Most guys reading this will know what I'm talking about and won't underestimate the importance of this.

I made my mind up pretty much there and then that I wanted to move forward and go ahead with an HT. The HT was scheduled for September and he was in constant contact throughout, responding promptly to any queries or concerns. Upon leaving to go abroad I was in a positive frame of mind and didn't feel anywhere near as anxious as I thought I might. Since returning I have saved myself a packet and obtained some Proscar through Spex's doc. Cheers mate.’

*Lee (user name is Jessie on forums)*

‘I have to say Spex. You always pass on great information to the users of the forum. The information is quite accurate and non-biased. Keep up the good work.’

*Dr Glenn Charles*

*Member, International Alliance of Hair Restoration Surgeons*
‘I underwent a hairline restoration four years ago. It was a horrible procedure that left some noticeably bad results. I finally decided to start figuring out a way to fix the situation. I had difficulty finding proper information which was frustrating considering how much stress the whole problem caused me. Most doctors I contacted did not have the time to properly answer my questions and make me feel confident in my plan of attack. Spex answered all my questions and brought considerable ease to my situation. His knowledge and personal experiences gave me the information I needed to fix my hair problem. Thanks Spex!’

TD

‘I’d been surfing the hair loss boards for a few years and saw Spex’s posts around on different forums, along with people’s positive responses to him. A few years later when I was considering an HT, I remembered this guy and found his website, it was full of photos and great advice about hair transplants. There and then I made a spontaneous decision to email him, next morning I had a reply, and we decided to meet up. I was anxious about getting there and being given the hard sell and biased information, but within minutes that worry evaporated and I was sat next to someone who knew all about the hell of hair loss and the danger of going in to hair transplants unresearched, far from being biased he told me which doctors do the best work, and offered me guidance and advice, and told me how the hair transplant industry works.’

Petschki

‘I first contacted Spex in February 2009 looking for information about an HT repair after experiencing multiple failed procedures from a clinic in London, which was having a big impact on my life. By that stage I had really given up hope of ever having a successful outcome. But having discovered some of the online HT forums, I contacted Spex. After a number of email exchanges, Spex invited me to the UK, so I travelled from Ireland and we met up and he gave his opinion on what could be done, being an ex-repair patient himself. I found his help and advice invaluable, both in deciding on a repair strategy and the advice on meds to prevent further loss. He is also a genuinely nice guy who totally understands how detrimental a previous bad procedure can be.'
After months of further correspondence and advice from Spex I went for a repair at the start of June 2009 and now 14 months later I am at a stage I never thought I’d reach where I am very satisfied with the outcome and I have put all my past bad experiences behind me.’

_Lastchance_

‘I don’t think I’m any different from any other guy out there, losing his hair and freaking out. I’m also incredibly sceptical of any new hair solutions, so many of which are being spouted like so much snake oil everywhere, but after doing a few years of research, I am convinced that a hair transplant with a respected doctor is the way to go. In so doing, I discovered the forums where like-minded nervous and ex-patients gather to share their experiences.

After narrowing it down to the doctor of my choice, I was introduced to Spex, an ex-patient of Dr Fellers, and since I am in the UK, I was looking to meet real people and see real results to calm my paranoia.

Even though I’ve got a million questions, and need constant reassurance, Spex has been there from the first day I made my enquiry to the US. If I had to describe him in one word, it would be consistent. He is quick to respond to text messages, phone calls, or emails. He is highly active on a few forums, and endeavours to answer any and all questions people throw his way, as well as showcase his own personal results. This makes the biggest difference to a newbie about to undergo a new and scary experience, so closely tied to his self-image.

Spex has infinite patience, which I will be forever grateful for. Please keep it that way.’

Adam

As a young(ish) guy who’d been losing his hair since the age of 18, hair loss effectively became the dominant force in my life, affecting how I behaved, where I went, what I did, taking no time at all to become a complete obsession. Words can barely even describe the personal anguish and turmoil I felt.

Discovering Spex and attending his meets which he so charitably and brilliantly organised was the greatest thing that could have happened to me. The information and help he provided bore new hope in me, made me think positive, as well as informing me of the options
available to me. Through Spex, I also avoided the unfortunate circumstances that have befallen other hair loss sufferers, where they've not visited the correct doctors and achieved very poor results.

Spex has been amazing and for any fellow hair loss sufferer, I can't recommend listening to him enough!

S

‘When I first began considering having a hair transplant, I felt bewildered by a world of fancy websites, expensive products, touched-up photos and shills. What I needed was someone honest, frank and plain speaking who would tell it like it is: the pros, the cons, realistic expectations, no rushing, no pushing and no fancy promises. I found Spex. I'm glad I did.’

Acrobaz

After wasting endless amounts of money on lotions, lasers and hair pieces, and not being convinced from the consultations I had from UK clinics, I googled hair transplants one Sunday afternoon, this lead me to some very detailed forums, this was where I spotted Spex.

I was really impressed and decided to e-mail Spex a few times and then eventually met him for advice. The guy was honest, genuine and up front, I had to keep pinching myself to make sure I wasn't dreaming, as great advice and help doesn't normally come free in this world without a catch...

A few years later, having had two successful hair transplants by Dr Feller, I am now booked in for my 3rd hair transplant, with the help from Spex and Dr Feller.

I just want to point out that if I hadn’t met Spex I probably would have wasted money and valuable donor hair on a UK clinic...

This guy is a legend, a complete life saver, in fact there should be an option for Spex when you call 999... I can't thank this guy enough, and when the results from my 3rd HT come out, he will be the reason my life has changed for the better... Thank you Spex

Mr T
Glossary

A

Alopecia: The general scientific term for hair loss. There are many subtypes of Alopecia including: Androgenetic Alopecia, Alopecia Areata, Traction Alopecia, Alopecia Universalis.

Alopecia Areata: An autoimmune disease that causes the body to form antibodies against some hair follicles. Alopecia Areata causes sudden smooth, circular patches of hair loss. There are no known cures and in many cases the hair grows back on its own.

Alopecia Totalis: An autoimmune disease similar to Alopecia Areata but that results in the loss of all hair on the scalp. It may begin as Alopecia Areata and progress into Alopecia Totalis.

Alopecia Universalis: An autoimmune disease that results in the complete loss of all hair over the entire body, including eyelashes and eyebrows

Amino Acids: The building blocks of protein. A deficiency of amino acids may adversely affect hair growth.

Anagen: The active growing phase of the hair cycle. It lasts for approximately 3 years with a range of 2-7 years.

Anagen Effluvium: Loss of hair that is in the anagen or growing phase. This is the type of hair loss that is associated with chemotherapy or radiation treatment.

Androgenetic Alopecia: Hair loss that results from a genetic predisposition that makes follicles sensitive to the effects of DHT. This is the most common form of hair loss and can also affect women. Other terms for this condition include: MPB, male pattern baldness, female pattern baldness, hereditary Alopecia and Androgenic Alopecia.

Atrophy: The wasting away or a diminution in the size of a follicle so that cannot produce terminal hair anymore.

B

Benign Prostate Hyperplasia: Also known as BPH, a condition usually found in older men when the prostate gland swells, restricting urine flow. This prevents the bladder from
emptying completely, causing frequent and difficult urination. The most common treatment for this is Proscar, which shrinks the size of the prostate by inhibiting DHT production.

C

Catagen: The end of the active growing phase of the life cycle of the hair. It is a transitional stage between the growing phase (anagen) and the resting stage (telogen). In catagen all growth ceases and the ‘club’ hairs are formed.

Club Hair: A hair that has stopped growing and is in the catagen or telogen phase. It is attached to the skin with a ‘club-like’ root, but will eventually be pushed out and replaced by a new growing hair.

Cobblestoning: Cobblestoning occurs in almost all hair transplant procedures where ‘plugs’ are used. It is caused when the plugs that are inserted do not heal flush with the skin leaving the scalp lumpy.

Compression: Occurs sometimes when grafts are put into slits when the existing tissue 'compresses' the follicle. This can cause poor growth and/or improper direction of the hair.

Couvreur: A coloured cream used as a cosmetic to fill in the bald spots on the scalp. It blends in with the hair colour and temporarily gives the appearance of more hair.

Crown: The top or highest part of the head.

Cuticle: The outer surface of hair composed of overlapping scales made of colourless keratin protein. It gives hair lustre and shine and also provides some of its strength.

D

Dermal papilla: A group of specialized cells at the base of the hair follicle.

Dermis: The skin is comprised of two layers, the outer layer which is the epidermis, and the inner layer which is the dermis.

DHT: Testosterone, a male hormone, is converted into DHT or Dihydrotestosterone in various tissues of the body and the skin. The enzyme 5 alpha reductase converts testosterone into its more potent form DHT. DHT is responsible for causing hair loss known as Androgenetic Alopecia and for stimulating the growth of body hair.
**Donor site:** The region of the scalp from which hairs are harvested for transplantation into balding areas of the scalp. The donor area, usually at the back or side of the head, contains hairs that are unaffected by DHT.

**Epidermis:** The tough outer protective layer of the skin.

**5-Alpha-Reductase:** An enzyme that converts testosterone into a more potent form called dihydrotestosterone (DHT). There are two types of 5-AR, type 1 and type 2. Type 1 is found mainly in the skin and type 2 is found in the follicles and in the genital tissues.

**Finasteride:** The active ingredient in Propecia and Proscar, Finasteride inhibits the enzyme 5-alpha reductase type 2 that converts testosterone into DHT. This lowering of DHT in the body leads to a halting of hair loss and causes regrowth of hair in people suffering from Androgenetic Alopecia.

**Flap:** A type of hair replacement surgery in which a flap of hair-bearing scalp is taken from the side of the head and transferred to bald areas of the scalp. The flap is usually still attached to the scalp on one side to maintain the blood supply to the flap.

**Follicle:** A tubular sheath below the surface of the skin, from which hair develops.

**Follicular Unit:** Natural groupings of hair that grow together in the scalp and share the same blood supply and sebaceous gland. Follicular Unit Transplantation involves keeping this natural group of hairs intact when transplanting them from one part of the scalp to another.

**Follicular Unit Extraction (FUE):** Individually harvesting follicular units from the donor area for transplantation.

**Grafts:** Transplanted hairs that are removed from one part of the scalp and are grafted, or transplanted, into the balding area of the scalp. Some commonly used grafting techniques are slit grafts, micro grafting and mini grafting.

**Gynecomastia:** Excessive development of the male breasts. Usually occurs as a result of excessive oestrogen production and can be a side effect of DHT suppression.
Hair cloning: Cloning hairs involves extracting hair follicle cells and culturing them in a laboratory until they multiply several times and then implanting them into the scalp where they form new follicles and being producing new hairs.

Hair lift: Surgical procedure used to eliminate large areas of bald scalp by lifting and moving the entire hair-bearing scalp in an upward and forward direction.

Hair pieces: A base that is covered with human or synthetic hair that is attached to the scalp to give the illusion of natural hair. Also known as a toupee, wig or hair system.

Hair shaft: The term given to the part of the hair that is above the skin.

Hair pluck test: The hair pluck test is used as a diagnostic test for Alopecia and is helpful in determining whether or not a telogen effluvium is the cause of hair loss. A group of 20-30 hairs is plucked and then examined by the doctor.

Hypertrichosis: Excessive growth of terminal hair in areas not normally hairy. It is usually associated with the use of certain drugs like corticosteroids, diazoxide, minoxidil.

Inflammation: Inflammation is the reaction of living tissues to injury, infection or irritation. Inflamed tissues are characterized by pain, swelling, redness and heat. Anything that stimulates an inflammatory response is said to be inflammatory.

Intermediate hairs: Hairs that are between vellus and terminal hairs. They contain a small amount of pigment but are smaller and thinner than terminal hairs.

Keratin: A tough protein that is the primary constituent of hair, nails and skin.

Keratinocyte: A skin cell from the uppermost layer of the epidermis.

Ketokonazole: An antifungal agent that also has antiandrogenic properties. This is the active ingredient in the shampoo Nizoral.
**L**

**Lateral Slit Technique:** Placing slits laterally in the recipient area to receive grafts and avoid compression of the surrounding follicles.

**Linear graft:** A method of hair transplantation where transplanted hairs are removed using a linear (elliptical) punch, also called slot grafts.

**M**

**Male Pattern Baldness:** Also known as MPB or Androgenetic Alopecia. This is the most common type of hair loss that is caused by hormones, and affects the central and frontal area of the scalp.

**Medulla:** The innermost layer of hair that reflects light, giving hair its various colour tones. Vellus hairs lack a medulla.

**Megasession:** A transplant procedure in which a large number of grafts, usually 1500-3000, are performed in a single operation.

**Melanin:** The pigment that gives colour to the skin and hair. The greater the amount of melanin, the darker the hair.

**Micrograft:** A small hair graft consisting of one or two hairs.

**Miniaturization:** The process whereby the follicle produces thinner and thinner hair until it’s no longer able to produce terminal hair and can only produce fine vellus hair.

**Minoxidil:** Approved for use to treat hair loss under the name Rogaine, Minoxidil is believed to stimulate hair growth.

**N**

**Nioxin:** A herbal-based hair product sold in salons to treat thinning hair and hair loss.

**Non-scarring Alopecia:** A broad category of hair loss types like Androgenetic Alopecia where the hair follicle remains functional and offers the likelihood that hair loss can be reversed.

**Norwood Scale:** A scale that measures the severity of male pattern hair loss.
P

**Propecia:** The first FDA approved pill for hair loss. Propecia contains 1mg of Finasteride which inhibits the enzyme 5-alpha reductase type 2 that converts testosterone into DHT.

**Proscar:** A medication for treating an enlarged prostate (BPH) that contains 5mg of Finasteride, the same ingredient that is in Propecia. Some men use Proscar instead of Propecia since it’s cheaper when cut into five pieces.

**Punch graft:** A group of 10 to 20 hairs that has been removed from the donor area with the use of a circular punch.

R

**Recipient site:** The area of the scalp into which hair grafts are transplanted.

**Retin-A:** Derivative of vitamin A, which is required for proper bone development, night vision and skin integrity. Retin-A has been used extensively to combat aging of the skin and acts as a chemical peel. Some hair loss formulations include Retin-A to increase the absorption of Minoxidil. Excessive Retin-A use can result in hair loss.

**Rogaine:** The brand name for Minoxidil.

S

**Saw Palmetto:** The botanical name for Saw Palmetto is Serenoa Repens. Saw Palmetto has been used to treat an enlarged prostate in the same way as Proscar and some companies are using it in formulations to treat Androgenetic Alopecia.

**Scalp reduction:** A surgical procedure designed to reduce the size of the balding areas in which an ellipse of bald scalp is surgically removed and the scalp stitched together.

**Scleroderma:** A disease of the skin and connective tissue that causes the skin to become hard and can result in hair loss.

**Scarring Alopecia:** Inflammation of the hair follicles can lead to scarring Alopecia. This form of Alopecia is easy to identify because rough patches on the surface of the scalp made up of small blood vessels and tissue are present. Scarring Alopecia has many different causes such as bacterial, viral and fungal infections.
Sebaceous glands: Fatty glands found in hair follicles throughout the body that secrete oil into the hair and surrounding skin.

Seborrheic dermatitis: A form of inflammatory skin rash that results from an over activity of the sebaceous glands in the skin. Treatment often includes a mild hydrocortisone cream.

Sebum: A thick greasy substance that is secreted by sebaceous glands.

Shock fallout/shock loss: The loss of hair that often occurs after hair transplantation. The resulting trauma causes some of the hairs to go into the resting phase and some of the existing hairs are lost. The loss can be permanent or temporary.

Spironolactone: It is most commonly used for acne and is also used topically to treat Androgenetic Alopecia.

Stretch back: A condition that occurs after a scalp reduction procedure due to the elastic characteristic of the skin. The bald area that could not be eliminated totally during a scalp reduction increases in width three months after the procedure, thus reducing the procedure's effectiveness.

Strip Method: Method of harvesting follicles from the donor area by removing a narrow strip of scalp.

Staple: Method of closing a wound using tiny staples

Suture: A synthetic or natural based line that is used to close a wound.

Telogen: The resting phase of the life cycle of the hair. This phase lasts for three to four months and ends as new hairs (anagen) emerge and push out the old telogen hairs (shedding).

Telogen Effluvium: Telogen effluvium is an abnormal loss of hair due to alteration of the normal hair cycle. Normally, most of the hairs are in the growth stage and only 100 hairs per day fall from the scalp. When telogen effluvium occurs, a greater proportion of the hairs enter the resting phase of the cycle and hair shedding is greater than normal.

Temporal recession: Hair loss that occurs in the temple regions where the hair line retreats leaving a V shaped pattern.
**Terminal hair**: Long coarse hairs that are pigmented, fully developed and found on the scalp, beard, pubic area, arms and legs.

**Testosterone**: The male hormone that is released by both the adrenal gland and the testicles and promotes the development of male characteristics.

**Topical**: Any solution that is administered by applying it to the surface of the skin. In theory this limits the activity to the area it was applied to and prevents side effects, but in reality certain medications can be absorbed through the skin into the blood stream.

**Traction Alopecia**: Hair loss that occurs due to a strain put on the hairs. Traction Alopecia is commonly seen with braids, ponytails and other hairstyles which place a constant tension on the hair and the scalp.

**Transsection**: Damage done to the hair follicle during harvesting of the donor hair or dissection of the grafts when the scalpel accidentally cuts follicles. This results in the loss of the follicle.

**Trichology**: A para-medical degree in England and Australia that is approximately equivalent to a Masters degree. It is conferred through the Institute of Trichologists and its practitioners, called Trichologists, treat patients with hair loss. Trichologists are not doctors or surgeons and are not licensed to prescribe prescription medications. They generally adopt a holistic approach to treating hair loss.

**Trichotillomania**: An obsessive-compulsive disorder that causes a person to pull their own hair out which can lead to permanent hair loss. The hair loss tends to be localised and the resulting patch is angular in configuration. Treatment usually requires counselling and/or medication.

**Vellus hair**: Fine colourless short hair covering most of the body surface. In people with Androgenetic Alopecia, vellus hairs replace terminal hairs. Vellus hairs lack a central medulla which accounts for their fine and colourless appearance.

**Vitiligo**: A skin disorder characterized by smooth, irregular white patches of the skin caused by the loss of the natural pigment. The peak incidence occurs during childhood to mid adult life.
The End