Male pattern hair loss

What is male pattern hair loss?

Male pattern hair loss (also known as androgenetic alopecia) affects all men to some degree as they grow older. Progressive thinning of the hair on the head eventually leads to baldness. The hair loss usually begins at the temples, with the hairline gradually receding. Subsequently, hair at the crown (back) of the head also starts to get thinner.

In severe cases, loss of hair progresses over the entire crown of the head, leaving only a horseshoe pattern of hair around the back and sides of the head (see Figure).

What causes male pattern hair loss?

Testosterone is the most important androgen (male sex hormone) in men and is needed for normal reproductive and sexual function. Testosterone is important for the physical changes that happen during male puberty, such as development of the penis and testes, and for the features typical of adult men such as facial and body hair. In the body, testosterone is converted to DHT by an enzyme (5-alpha reductase). DHT acts on different organs in the body including the hair follicles and cells in the prostate.

In some families there are genes passed on through the family that make men more likely to have androgenetic alopecia. In men with these genes, the hair follicles are more sensitive to DHT. This leads to hair follicle miniaturization (where the hairs growing from the follicles become thinner and shorter with each cycle of growth) at a younger age.

The balding process is gradual and only hair on the scalp is affected.

How common is male pattern hair loss?

Most Australian men will become aware of hair loss as they grow older. Significant balding affects about one in five men (20%) in their 20s, about one in three men (30%) in their 30s and nearly half of men (40%) in their 40s.

Should I be worried about hair loss?

Many men accept male pattern hair loss as a normal part of ageing. However, some men seek treatment to try to stop or slow further hair loss, for cosmetic reasons.

What is the emotional impact of hair loss?

While hair loss is a normal part of the ageing process, for some men it can be distressing, particularly if it happens at an early age. Men losing their hair can feel less confident, less attractive and may think it makes them look older; some may feel depressed.

Some men find talking to a counsellor helpful if they are feeling worried about their hair loss.

How is hair loss treated?

Men usually seek treatment for cosmetic rather than medical reasons. Some medicines can stop or slow hair loss, with new hair growth happening in some men.

What medicines can treat hair loss?

The two main medicines used to treat male pattern hair loss are:

Finasteride (also known as Propecia®)

Finasteride is taken as a tablet and works by blocking the conversion of testosterone to DHT. The hair follicles are then not affected by DHT and can grow normally. About two in three men who take finasteride every day get some hair regrowth. One in three men may have no hair regrowth but most of these don't have any further hair loss. Finasteride has no effect in about one in 100 men.

Finasteride can take up to four months to have an effect and up to one to two years before hair regrowth can be seen. Hair growth is usually greater over the crown than over the front areas of the scalp. If treatment is stopped, the balding process will start again, so ongoing treatment is needed for long-term benefit. Side-effects are uncommon, but about two in 100 men taking finasteride experience a lower libido (sex drive).

Finasteride (marketed as Proscar®) is taken in higher doses as a treatment for benign prostate enlargement.
Finasteride taken at these higher doses may raise a man's chance of getting certain types of prostate cancer. However, the much lower dose used for hair loss is not known to have any effect on a man's chance of developing prostate cancer.

If you have any concerns, speak to your doctor.

Minoxidil (also known as Rogaine®, Hair a-gain®, Hair Retreva®)

Minoxidil is a lotion that is rubbed onto the head. About half of the men using minoxidil have a delay in further balding. About 15 in 100 men have hair regrowth, while hair loss continues in about one in three users. Minoxidil needs to be rubbed onto the scalp twice daily, and used for four months before results can be seen. Treatment needs to be ongoing for hair growth to continue; any hair that has regrown may fall out two months after treatment is stopped.

Side-effects are uncommon, but minoxidil can cause skin irritation or a rash in some men.

Is there a link between male pattern hair loss and prostate cancer?

Because testosterone, through the action of DHT, is involved in the growth of the prostate and hair growth, some studies have been done to see if men who are balding are at an increased risk of prostate cancer. An Australian study found a link between men with vertex hair loss (hair loss from the crown only) and prostate cancer. There was no association found between prostate cancer and men with frontal hair loss, or frontal hair loss together with vertex hair loss.

More studies are needed to answer the question of links between hair loss and prostate cancer.

What are some myths about male pattern hair loss?

Standing on your head lessens hair loss

The ‘blood-flow’ theory led to the myth of standing on your head to treat male pattern hair loss. While minoxidil is suspected to work, in part, by increasing blood flow to hair follicles, there is no evidence that standing on your head will stop hair loss or make hair regrow.

Hair loss comes from your mother’s side of the family

There is a myth that hair loss is a genetic trait passed down from the mother’s side of the family. Genetics is the cause of male pattern hair loss, but a number of genes are responsible and they probably come from both parents. If there is a close relative with male pattern hair loss there is a higher risk of the condition.

Hair loss happens in men with high testosterone levels

Some men think they are losing their hair because they have higher levels of the male sex hormone testosterone. High levels of testosterone are not linked with hair loss.

For more information visit www.andrologyaustralia.org, call 1300 303 878, or speak to your doctor.