**Oral Minoxidil for Hair Loss**

Minoxidil is a successful hair treatment to improve thinning of hair or hair loss.

It has a non specific mechanism of action- it improves the circulation available to the hair follicle, increasing the growth of stronger and thicker and supporting dormant hair follicles to grow hair again.

Minoxidil can be used as a lotion or foam on to the hair (topical) or as a tablet via mouth (oral or systemic)

*First- do no harm:*  always start with an topically medication first, as this has less side effects and may wo.rk well without putting you at risk of side effects

**Indications for oral minoxidil**

* Male Pattern hair loss
* Female Pattern hair loss
* Telogen Effluvium
* Traction alopecia

**Why change from topical to oral?**

According to the medical literature, I consider prescribing oral minoxidil in male and female patients, after a trial of topical minoxidil for at least 6 month, if it does not work or is associated with problems e.g.

* rash, irritation or allergy to topical minoxidil
* no benefit from topical Minoxidil after 6 months of diligent use
* cosmetic change in hair due to minoxidil (dry scalp or hair, or hair breakage)

**Why does topical minoxidil not work?**

Some people don’t respond to topical Minoxidil as they lack the enzyme in their hair follicles to activate minoxidil into an active form (minoxidil sulphate). IN tablet form, the medication should work as the liver activates it, so it will work in these patients.

**How effective is oral minoxidil?**

Studies show 2/3 people respond to minoxidil. 1/3 notice a reduction in hair shedding, and 1/3 notice improved growth of the hair. Response takes 6- 12 months). There is one clinical study that compared oral and topical minoxidil for a small group of female patients with FPA over 6 months. It showed 12% increase in hair density for the oral medication and 7% for the topical solution). So the tablet may be better, but cuase more side effects.

**Side Effects**

Low dose minoxidil works to improve hair growth.

Side effects are low- this is not a case of “more is better” – start low and go slowly. Otherwise you can experience side effects.

The side effects occur in about 2/100 women, 1/200men.

* **Excessive hair growth on the face and body**

This can usually be managed with waxing./hair removal. Most people accept this as a side effects. This usually bothers women more than men!

Please use the doses prescribed as low doses have a low incidence of excessive hair growth

* **Temporary hair shedding.**

*Short term hair shedding is common with topical or oral minoxidil*. It usually starts in the first month or so and stops after 3months. If you do get this symptom, don’t lose hope- it’s a sign the treatment is working. If it persists after 6 months, you may need a referral to a dermatologist and a scalp biopsy.

* **Fluid retention**

**e.g ankle , periorbital and hand swelling**

This is rare <2%) and is more common at high doses.

* **Dizziness/Low blood pressure**

Minoxidil was traditionally used as a blood pressure tablet. It is rarely used now. The doses we used were high (10 – 40mg). When we use low doses for hair rejuvenation, it is uncommon for the blood pressure to be impacted. However it can as everyone has different genes- so again please keep the dose low and don’t get over excited.

Occasionally, patients are very sensitive to minoxidil and they do get a change in their blood pressure even at low doses. This is rare. (approx. 2%). Most people manage this with increasing hydration and taking it slow when changing posture/positions.

* **Fast heart rate.**

This symptom is probably related to the above issue (dizziness/postural hypotension). It is a rare side effect (1%) but if you do develop it, I generally reduce the dose or stop the medication as long term fast heart rate is not good for the cardiac muscles.

* **Headaches**.

Occasionally people get a headache , but this is very rare (0.4%). this seems to resolve naturally over time in most people. If it does not improve, I generally stop the medication.

* **Rare side Effects**:

Medications can cause all kinds of side effects, some of which we can’t explain. This may include: nightmares, insomnia, pericarditis, skin rashes, nausea, vomiting, and breast tenderness.

If you get anything you are worried about, you can stop your medication and talk with me or your GP. This is not an emergency medication and can be stopped straight away if you are worried. If you have an acute medical concern like dizziness, chest pain or fainting- you need to se a doctor on the day and tell them you are on minoxidil. You should show them this handout.

**Doses of oral Minoxidil**

The optimum dose for hair loss is not entirely clear. I generally use 0.5mg- 1mg in females and 1mg – 2.5mg in men.

This low dose needs to be compounded at a chemist. Sometimes you can use a standard prescription but you will need to cut the tablet into a very small amount with a pill cutter (you purchase this from the chemist). Sometimes I will add in other components such as spironolactone in women, and finasteride in men.

**Who should not take oral minoxidil**

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* drug allergy – NB it appears that oral minoxidil is safe if you have reacted to topical minoxidil (usually the reaction is to a preservative in the topical preparation)
* pulmonary hypertension with mitral stenosis
* severe hepatic impairment
* angina or recent myocardial infarction (heart attack)
* left ventricular hypertrophy
* heart failure

**Off label Prescribing**

Low dose minoxidil for hair thinning and hair loss is off label , but evidence based.

Doctors often prescribe medications that are “off label” – this means they do not have long term, quality clinical trials to support their use.. However, this does not mean that there is no evidence!

In general there is a sufficient level of evidence for doctors to prescribe minoxidil if it is an area of medicine they are experienced in. The risk and benefits of any medication must always be weighed up, by the patient and the clinician , as no medication is without risk

Your normal GP will probably not prescribe you this medication as they are not familiar with this. However I have done extra studies in cosmetic dermatology and aesthetics and I commonly see hair conditions in my practice.

In general, I see my patients every 6- 12 months, check progress. Iusually ask that you get a BP monitor to monitor your BP at home, and send me your measurements. If things are going well we catch up briefly every 6 months via telehealth. If you wish to use a medicare rebate for your consultations, you need to see me face to face once a year, however many people chose to just do it privately as the consultation is brief.

**How do I prepare to start oral Minoxidil?**

Please make sure you disclose all the medication s you are on. Oral Minoxidil should be used with caution if you are on other medications that reduce blood pressure. You must speak to your GP about this before hand as they will probably want to clear this medication and monitor your Blood Pressure more often.

Please take your weight, blood pressure (sitting and standing) and heart rate before you start and again after 1- 2 weeks until the trend is stable.

 Checking it once a month is good practice- you can keep a diary in your phone. If you change the dose, please monitor your blood pressure more often. If you are sick, especially with an illness that causes dehydration (e.g. gastro or the flu), please stop the medication as it is not life saving.

**Expectations for long term Minoxidil**

Minoxidil is not a cure for hair loss. It works to slow down hair loss and optimise the function of your hair follicles., it does not change your hormones or genes.

You may still get ongoing hair loss whilst on minoxidil, albeit as a lower pace.

If you stop taking it, it will no longer work and your hair loss will accelerate again- if it works, minoxidil should be considered to be a long term treatment.

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