

Minoxidil is the only medication with proven benefits for treatment of Androgenetic Alopecia in women who do not have elevated androgen (“male” hormone) levels. Minoxidil can also be used for Telogen Effluvium and early Traction Alopecia but the cause should be sought and resolved first, if possible. It may even be used as an additional treatment for Alopecia Areata.

Anti-androgens are only helpful for women who do have elevated androgen levels.

### **Minoxidil**

Minoxidil (Rogaine®, Regaine, or Apogaine) is a topical treatment that is applied to the dry scalp twice daily. In Canada, 2% lotion is available over-the-counter (OTC) but 5% lotion requires a prescription. 5% foam is not available in Canada. In the USA, 5% lotion or foam is available OTC. Minoxidil 5% lotion is more effective than 2% but is more likely to cause skin irritation. Many women prefer the foam because it is easier to apply and gentler on their scalp than the 2% lotion and doesn’t leave as much residue in their hair. Some packages say that 5% Minoxidil is only for men but it has been proven safe and effective for women. It is not worth paying more to get the pretty pink packaging.

Minoxidil was originally developed as a tablet for blood pressure control but caused unwanted facial hair growth for some when taken orally. It does not seem to improve scalp circulation, as first thought, but seems to bring on and maintain a longer Anagen (growing) phase. The exact mechanism is still unclear. For people with thinning, miniaturizing hair, Minoxidil can slow hair loss or cause mild to moderate improvement but rarely causes dramatic improvement.

Minoxidil should be used for at least 6 months before deciding if it is helping or not. When it first starts working, some new growing hairs may push out more telogen hairs than usual so increased shedding in the first few weeks may actually be a good sign. Most people do not notice shedding even if the Minoxidil is working.

At recommended dosages, the most common side effects are temporary skin irritation, redness, flaking, or itching. This occurs in 2% of people using 2% Minoxidil and 6% of people using 5% lotion. The 5% foam may be gentler than the 2% lotion. Other side effects like headaches, dizziness, or palpitations are unlikely to occur unless recommended dosages are exceeded or the scalp is wet, leading to more absorption. Rarely, women may get temporarily increased facial hair with topical Minoxidil that resolves shortly after stopping it.

Minoxidil can be used with hair transplantation to reduce postoperative shedding of existing hair, to help slow loss of existing hair, and to speed up the growth of the transplanted hair.

### **Anti-androgens**

Women with elevated androgen (free testosterone or DHEA-S) levels usually have some other symptoms in addition to hair loss such as excessive acne, a rash in the middle of the face called seborrhoea, ovarian cysts, irregular menstrual cycles, trouble getting pregnant, weight gain, or a family history of diabetes.

In those women with proven elevated androgen levels, there are specific medicines that can slow hair loss. If you think that you may have elevated androgen levels it is important to consult a physician and have appropriate tests before considering anti-androgen treatment.