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IN BRIEF

Oral Minoxidil for Hair Loss

Topical minoxidil (*Rogaine*, and others), which is available over the counter, has been used for treatment of hair loss in men and women for more than 30 years. Recently published trials suggest that off-label use of a low dose of oral minoxidil may also be effective.

MINOXIDIL – Topical minoxidil (5% foam and 2% and 5% solutions) is minimally to modestly effective for hair regrowth, but it can cause scalp irritation and altered hair texture. It is often used with an oral antiandrogenic drug such as spironolactone.¹ Oral minoxidil, which is available by prescription in 2.5- and 5-mg tablets for treatment-refractory hypertension, has been used for hair loss in doses lower than those used for treatment of hypertension in patients who cannot tolerate topical minoxidil.

CLINICAL STUDIES – Low doses of oral minoxidil (0.25-2.5 mg daily) have been shown to be effective for hair regrowth.^{1,2} In an open-label trial, 52 women with hair loss were randomized to receive oral minoxidil 1 mg or topical minoxidil 5% solution once daily for 24 weeks. Oral and topical minoxidil were similarly effective in improving hair density, but the oral formulation was associated with a higher incidence of adverse effects.³ A systematic review and meta-analysis of 6 studies examined the association between the dose of oral minoxidil (0.25-5 mg daily) and its efficacy for androgenetic alopecia. Use of higher doses was associated with statistically significant increases in hair diameter and total hair density at 6 months, but also a higher incidence of hypertrichosis.⁴

ADVERSE EFFECTS – The most common adverse effects of oral minoxidil in the low doses used for treatment of hair loss are hypertrichosis and pretibial edema. The drug can also cause tachycardia, pericardial effusion, hypernatremia, and, rarely, Stevens-Johnson syndrome and toxic epidermal necrolysis.

PREGNANCY AND LACTATION – Oral minoxidil should not be used during pregnancy or while breastfeeding. Neonatal hypertrichosis has been reported in infants of mothers who took oral minoxidil during pregnancy.

CONCLUSION – Oral minoxidil, in doses lower than those used for hypertension, is effective for treatment of hair loss, but it is more likely than topical formulations (*Rogaine*, and others) to cause hypertrichosis and pretibial edema, and the optimal dose has not been established. ■

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4. AK Gupta et al. There is a positive dose-dependent association between low-dose oral minoxidil and its efficacy for androgenetic alopecia: findings from a systematic review with meta-regression analyses. *Skin Appendage Disord* 2022; 8:355.

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