In a patient with glaucoma who has unexplained hair loss, stop topical beta-blocker treatment

The Science behind the Tip

Beta adrenergic receptor blocking eye drops are often used to reduce the intraocular pressure. Because of absorption through the nasal mucosa, systemic beta-blockade may occur, leading to side effects that include bradycardia, hypotension and bronchospasm. Less commonly, sleep disorders, hallucinations, confusion, depression, fatigue, dizziness and decreased libido can follow treatment.\(^1\,^2\)

Alopecia is a rare, pharmacologically unpredictable adverse reaction to topical beta-blockers and can occur at any age. This has been reported secondary to the use of timolol, betaxolol and levobunolol.\(^3\) Hair loss starts from 1 to 24 months after commencing treatment, but hair growth normally returns to normal 4-8 months after stopping the beta-blocker.\(^3\) The cause of this side effect is not known.

References

3) Fraunfelder FT Meyer SM Menacker SJ Alopecia possibly secondary to topical ophthalmic beta-blockers. JAMA 1990, 16; 263: 1493-94

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