
SHORT COMMUNICATION

Case report

Eyelid hypertrichosis associated with Latanoprost is reversible

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A 56-year-old woman with primary open-angle glaucoma in an only eye presented with hypertrichosis after using Latanoprost to lower IOP. After trabeculectomy with adjunctive Mitomycin C, IOP was well controlled and antiglaucoma medications could be discontinued. At eight-month follow-up the abnormal eyelashes had disappeared. (Eur J Ophthalmol 2001; 11: 377-9)

KEY WORDS. *Hypertrichosis, Latanoprost, Side effects*

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INTRODUCTION

The Prostaglandin F_{2α} analogue Latanoprost which lowers intraocular pressure by increasing uveoscleral outflow, is one of a new class of drugs available to treat open angle glaucoma (1). A number of side effects have been documented including hyperpigmentation of both the iris and eyelashes and hypertrichosis (2-4). To date it is not clear whether these changes induced by Latanoprost are reversible. We present the case of a patient who developed reversible hypertrichosis associated with a period of Latanoprost use.

Case report

A fifty six year old woman with poorly controlled primary open angle glaucoma in an only eye was referred to the glaucoma service. The patient had a six year history of medical treatment for glaucoma including Guttae Dipivefrin, Guttae Timolol, Guttae Pilocarpine and Guttae Dorzolamide for variable periods. Previous argon laser trabeculoplas-

ty and two trabeculectomies, one with adjunctive use of an anti-metabolite, had also been unsuccessful. The patient's left eye had been blind since birth due to an unspecified cause, gradually became red and painful and was enucleated when she was in her twenties. At review the patient had been on medical antiglaucoma therapy for nine months consisting of Guttae Latanoprost 0.005% nocte, Guttae Betaxolol 1% BD, Guttae Apraclonidine TDS and oral Acetazolamide 250 mg QDS. The patient experienced difficulties with drop instillation due to her monocularity and applied the drops to the right upper lid allowing them to run into the right eye.

Best corrected visual acuity in the right eye was 6/36. Slit lamp examination demonstrated unilateral hypertrichosis involving the right upper eyelid above the eyelashes and at the medial canthus which was associated with telangiectatic vessels (Fig. 1). The hairs were coarse in nature, hypopigmented and misdirected with a vertical orientation (Fig. 1). Comparison of the right and left eyelids revealed no difference in normal eyelash length or number. Light microscopic examination demonstrated that



Fig. 1 - Hypertrichosis and telangiectasia of the upper lid.



Fig. 2 - Regression of vessels and hair eight months post discontinuation of Latanoprost.

the abnormal hairs were early intermediate/vellus hair between approximately 0.5 cm long with mild pigmentation (Fig. 2).

The right conjunctiva was hyperaemic with a vascularised, non functioning bleb, the intraocular pressure was 44 mmHg and the cup disc ratio was 0.7. The patient was admitted to hospital and intraocular pressure was reduced to normal with proper instillation of her medical therapy. In view of the patients compliance problems a right trabeculectomy with adjunctive Mitomycin C was subsequently performed which resulted in good intraocular pressure control and discontinuation of all anti-glaucoma medications. At eight month follow-up the right visual acuity was 6/24 and slit lamp examination demonstrated that the previously documented telangiectatic vessels and abnormal hairs had disappeared (Fig. 2). The drainage bleb was functioning, intraocular pressure was 18 mmHg and the cup disc ratio was still 0.7.

DISCUSSION

Documented side effects of Latanoprost include irreversible iris pigmentation, eyelash hyperpigmentation and in one series eyelash hypertrichosis (2-5). Unlike this case, the previous report of 43 patients using Latanoprost in one eye demonstrated increased eyelash length and number in pre-existing eyelash rows as well as additional eyelashes in areas adjacent to the lashline. While the ad-

ditional lashes described in this case were hypopigmented similar features to the previous series included lash coarseness and vertical misdirection (5).

Iatrogenic hypertrichosis has been described in association with a number of drugs including diazoxide and minoxidil (6, 7). The mechanism of action is thought to be increased cutaneous blood flow due to the potent vasodilatory properties of both these drugs (6, 7). Latanoprost, a selective prostaglandin F receptor agonist is thought to be devoid of the microcirculatory effects seen in naturally occurring prostaglandins (8).

Interestingly, a study of the effect of topical Latanoprost in the monkey eye has demonstrated a moderate increased blood flow to the anterior sclera for up to six hours after administration of the drug, although other regional blood flow in the eye was not altered (8). This transient localised increased blood flow could account for the documented reversible hypertrichiasis and lid telangiectasis seen in this patient associated with a period of Latanoprost use.

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