Hypertrichosis of the malar areas and poliosis of the eyelashes caused by latanoprost

Hipertricosis de las Áreas Malares y Poliosis de las Pestañas Causados por Latanoprost

To the Editor:

The synthetic phenyl-substituted analog of prostaglandin F_2 alpha (PGF_2-α), latanoprost, is an intraocular pressure-lowering drug for use in patients with primary open-angle glaucoma and ocular hypertension. Hypertrichosis of the eyelashes is a common reported adverse effect of this drug and of prostaglandin analogs in general since their introduction in the late 1990s.[1] Here we present a case of poliosis and bilateral hypertrichosis of the malar vellus hairs that occurred during use of ophthalmic latanoprost solution for glaucoma treatment.

A 64-year-old woman presented at our department complaining of excessive hair growth in both malar areas. The problem had started 6 months earlier and the hairs had progressively grown in number and diameter since then. Examination revealed hypertrichosis and poliosis of the eyelashes in addition to hypertrichosis of the malar areas. The whitened eyelashes were interspersed among normal-appearing eyelashes in both eyes (Fig. 1). There were no signs of hypertrichosis on any other parts of the body. The patient had had bilateral glaucoma for 4 years, and had been using latanoprost eye drops since diagnosis. She had a history of hypertension and diabetes mellitus and had been taking amlodipine tablets and oral acarbose for the treatment of these diseases for about 8 years. She had no other cutaneous or systemic disorders and the results of routine biochemical and hormonal tests were within normal limits. She denied use of any topicals creams, including sunscreens or corticosteroids, on her face.

Hypertrichosis is the growth of hair that is considered excessive for the age, sex, and race of an individual. It can occur all over the body or be isolated to small patches. PGF_2-α analogs have been observed to promote hair growth and may have hypertrichotic effects. The mechanisms by which prostaglandins trigger hair growth, however, are not clear. It has been suggested that hypertrichosis of the eyelashes following administration of prostaglandin analogs for glaucoma treatment is probably a result of the induction of the anagen phase in telogen-phase eyelash follicles.[2] These analogs may also prolong the anagen phase of eyelashes, leading to an increase in eyelash length.[3]

Eyelash hypertrichosis has been reported as a common adverse effect of ophthalmic latanoprost treatment, with frequency rates as high as 77%[4] and 50.5%.[5] Even brief exposure to an ophthalmic prostaglandin analog appears to be associated with eyelash changes. In one study, very brief exposure to latanoprost (<22 days) was reported to produce hypertrichosis similar to that seen with sustained exposure.[2] Our patient reported hypertrichosis of the vellus hairs of the malar area after 3.5 years of treatment.

Changes in the appearance of hairs other than eyelashes have been reported in a few papers. Reports of hypertrichosis of the vellus hairs of the eyelids,[1,5] inner canthus,[6] upper cheek,[7] and malar regions[8–10] can be found in the literature.

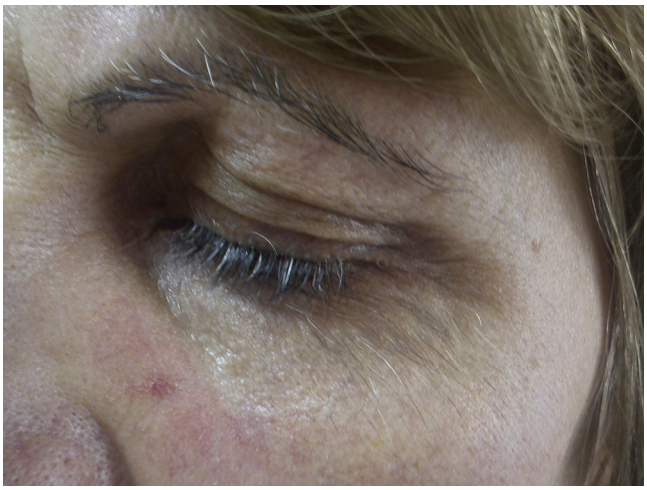

Figure 1 Poliosis, with affected eyelashes interspersed among normally pigmented eyelashes.

Chen et al.[11] reported poliosis in a series of 7 patients using different PGF_2-α analogs for primary open-angle glaucoma. The affected lashes were interspersed with normally pigmented lashes. Whole affected lashes were observed to be new, implying that the effect may result from failure of pigmentation in newly stimulated eyelash growth or from stimulated growth of previously inconspicuous white lashes. Our patient did not complain about her white eyelashes as she considered them to be normal age-related changes. It is, however, known that eyelashes do not generally turn white with age, and if they do, they normally only do so at a very late stage.[3]

Other local adverse effects of PGF_2-α analogs are iris pigmentation, conjunctival hyperemia, increased pigmentation of the periocular skin, deepening of the eyelid sulcus, periorbital fat atrophy and relative enophthalmos, anterior uveitis, and an increased risk of herpes simplex viral infection recurrence. There have also been some reports of systemic adverse effects, such as symptoms of common cold and upper respiratory tract infection, headache, abnormal liver function tests, asthenia and hirsutism.[12]

We thought it might be interesting to report this infrequently observed case to highlight the importance of considering topical PGF_2-α analog therapy as a possible cause of poliosis and hypertrichosis of the vellus hairs around eyes.

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Autocontrol fotográfico mediante *smartphones* para mejorar el diagnóstico precoz del melanoma

Skin Self-examination Using Smartphone Photography to Improve the Early Diagnosis of Melanoma

Sr. Director:

La autoexploración cutánea por parte del paciente ha demostrado ser una medida muy útil en la prevención secundaria del melanoma[1–4]. Diferentes estudios avalan que las campañas de concienciación y de autocontrol cutáneo permiten diagnosticar melanomas más finos y, por tanto, de mejor pronóstico[5]. El autocontrol puede optimizarse mediante la realización de fotografías de forma protocolizada[6]. Este registro fotográfico facilita por un lado la identificación de lesiones nuevas y, por el otro, permite apreciar cambios significativos en nevos preexistentes. Como ventaja adicional, los sistemas de autocontrol fotográfico mejoran el cumplimiento y la precisión del paciente en sus autocontroles[2]. Otras medidas que han demostrado ser útiles en el autocontrol fotográfico son la comparación de las fotografías con esquemas corporales[7] y la visualización de ejemplos de lesiones benignas y malignas[2].

Actualmente el autocontrol fotográfico por parte del paciente para mejorar la prevención secundaria del melanoma no es una práctica habitual[8], a pesar de ser una medida que ha demostrado ser efectiva[1–4]. Entre las razones que pueden influir están: la falta de conocimiento acerca de la importancia del seguimiento fotográfico, la incomodidad de realizar fotografías con una cámara fotográfica cuyas imágenes han de ser luego descargadas y almacenadas en el ordenador y la falta de cumplimiento del autocontrol por olvido.

Con estas premisas, presentamos una solución tecnológica para fomentar el autocontrol por parte del paciente: el desarrollo de una aplicación para *smartphones* (FotoSkin®) que permite al paciente realizar periódicamente y de forma protocolizada fotografías de su piel (mapeo corporal), que luego pudiera llevar a la consulta y mostrar al dermatólogo para que este conozca de forma más precisa la evolución de sus lunares u otro tipo de lesiones cutáneas (fig. 1). La aplicación incluye además otras 3 secciones que contribuyen a mejorar el conocimiento del paciente acerca del cáncer de piel, su concienciación y, por tanto, su cumplimiento con los controles y visitas al dermatólogo: 1) una sección informativa en la que se muestra al paciente las diferencias entre lesiones benignas y lesiones sospechosas o malignas, 2) una sección de algoritmos para ver el fototipo, riesgo de melanoma y nivel de daño actínico, y 3) una parte dinámica con el entorno que indica el índice de radiación ultravioleta y emite unos consejos prácticos de fotoprotección y exposición solar saludable.

La aplicación FotoSkin® tiene como objetivo principal ejercer de autorregistro fotográfico corporal de los lunares y otras lesiones cutáneas del paciente, que luego podrá enseñar al dermatólogo en las revisiones (fig. 2). Ello permitirá mejorar la precisión diagnóstica del dermatólogo al conocer la evolución de las lesiones cutáneas, e incluso mejorar la prevención secundaria del melanoma al percibir el paciente qué lesiones son nuevas o han cambiado[1], además de fomentar el cumplimiento del paciente con los autocontroles y las revisiones médicas. Como objetivos secundarios, FotoSkin® pretende mejorar la educación sanitaria acerca del melanoma, del cáncer de piel y de los hábitos de exposición solar saludable.