Figure 2 (A) 30-2 Humphrey visual field of the left eye showing a centrocaecal scotoma. (B) Trace array of multifocal electroretinography showing reduction in the retinal responses at the central and nasal macula (grey area) corresponding to the area of the scotoma.

may also occur in acute zonal occult outer retinopathy,¹⁰ and dengue fever-related maculopathy could therefore be an acute zonal occult outer retinopathy-like disorder. The use of mfERG enabled the diagnosis of dengue fever-associated maculopathy, which would otherwise be difficult to confirm in the absence of clinical or angiographic abnormalities.

Timothy Y Y Lai, Shaheeda Mohamed, Wai Man Chan, Ricky Y K Lai, Dennis S C Lam
Department of Ophthalmology and Visual Science, The Chinese University of Hong Kong, Hong Kong

Correspondence to: Professor W M Chan, Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong Eye Hospital, 147K Argyle Street, Hong Kong; cwm6373@netvigator.com

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Interferon alpha eye drops: treatment of atypical lymphoid hyperplasia with secondary alopecia

A typical lymphoid hyperplasia (ALH) of the conjunctiva is a benign tumour that can induce periocular oedema and rarely corneal decompensation. Orbital ALH can cause optic nerve compression. While most ALH is localized and treatable by observation; some require local resection, immunosuppression and radiation therapy.¹⁻² When "observation as treatment" is elected, ALH should be periodically inspected for evidence of malignant transformation.³

Topical chemotherapy has become an increasingly popular alternative in treatment of conjunctival tumours.⁴ Specifically, interferon-alpha eye drops have been used to treat squamous conjunctival malignancy with limited side effects.⁵⁻⁷ However, with systemic and subcutaneous administration, hair loss has been reported.⁸⁻¹⁰

While ocular side effects such as follicular conjunctivitis and conjunctival hyperaemia have been associated with interferon-alpha eye drops; there are no reported cases of hair loss following topical administration. Herein, we report a case of alopecia following topical interferon-alpha treatment.

Case report

A 33-year old female presented with bilateral conjunctival tumours and no history of hair loss. No systemic disease was found on pre-operative examination. Slit-lamp examination demonstrated bilateral pink coloured masses in

each fornix, bilateral diffuse conjunctival injection and eyelid oedema (fig 1). No proptosis, corneal exposure or evidence of optic neuropathy was A biopsy was required to determine that the tumours were benign (ALH), then "observation as treatment" was prescribed. Three months after her postoperative recovery, she continued to note ocular discomfort, eyelid oedema and ptosis (partially obscuring her vision).

After a discussion of the known risks and benefits of observation, steroid therapy, external beam irradiation, and topical chemotherapy, our

Figure 1 Topical Interferon Alopecia: Top, salmon coloured conjunctival atypical lymphoid hyperplasia beneath the tarsal conjunctiva of the left eye. Below, tumour is noted to fill the inferior fornix of the left eye. Informed consent was obtained for publication of this figure.

Figure 2 Topical Interferon Alopecia: Left, hair loss (arrow) from cranium is viewed at low and at higher magnification (right). Informed consent was obtained for publication of this figure.

patient consented to topical interferon-alpha therapy. The risks and benefits of therapy were explained in a discussion that adhered to the tenets of the Declaration of Helsinki and complied with the United States Health Insurance Portability and Privacy Act of 1996 (HIPPA).

Treatment involved placement of a punctal plug into the left lower eyelid followed by application of interferon-alpha eye drops (1-million units per millilitre four times per day for three months). She was taking no other medications during treatment. Ophthalmic examinations included a visual acuity determination, intraocular pressure measurement, slit-lamp examination and indirect ophthalmoscopy.

During her monthly examinations, a progressive reduction in tumour size and eyelid oedema was noted. However, at the end of treatment she complained of hair loss from her head temporally associated with topical interferon alpha therapy (fig 2).

Comment

Interferon induced a partial reduction in ALH and decreased eyelid oedema (a palliative treatment with no apparent ocular side effects). However, our patient noted scalp alopecia during treatment.

Though hair loss is a known side effect associated with systemic interferon alpha administration, searching the National Library of Congress online database (PubMed) with the key words (interferon, eye cancer, conjunctiva, alopecia, Intron) revealed no other reported case of alopecia induced by interferon alpha eye drops. As seen after systemic interferon alpha administration, her hair has started to grow back.⁹ However, it's reasonable to warn patients that alopecia can be associated with even the small dose used during topical interferon-alpha treatment of conjunctival tumours.

P T Finger, D Reichstein

From The New York Eye Cancer Centre, The New York Eye and Ear Infirmary, New York City, New York, USA

Correspondence to: Paul T Finger, MD, The New York Eye Cancer Centre, 115 East 61st Street, New York City, New York, USA 10021; pfinger@eyecancer.com

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Bilateral symptomatic angle closure associated with a regular dose of citalopram, an SSRI antidepressant

Symptomatic angle closure (also called acute angle closure, AAC) is a rare complication in patients receiving antidepressant treatment. The main mechanisms of AAC proposed in the literature are through the antimuscarinic and the serotonergic action of certain antidepressants¹ or through the development of choroidal effusions. In this unusual case, two different classes of antidepressants are highlighted, both of which seem to have had a direct effect of precipitating angle closure in our patient, but with differing timescales.

Case report

In December 2005, a 55-year-old Caucasian woman presented with a sudden onset of bilateral blurred vision, described as “grey net curtain”. The symptoms lasted for a few hours and then the vision returned to normal, leaving her with a mild headache. Her medical history revealed depression and an episode of thyrotoxicosis in September 2005 for which she had radioactive iodine treatment. She was initially taking imipramine which was switched to citalopram 20 mg/day in July 2005 and thyroxine since September 2005. She wore hypermetropic glasses with a prescription of +3.75 D (dioptre) OD, +4.75 D OS, and had axial length measurements of 22.8 mm OD and 22.5 mm OS. On examination, visual acuities were 6/6 and both corneas were clear and intraocular pressures (IOPs), however, were measured at 56 mm Hg OD and 34 mm Hg OS.

The pupils were mid-dilated and showed a sluggish reaction to light. Gonioscopy revealed appositional angle closure >270° right and around 200° left. There was no significant cataract present in either eye. Optic discs had no features of glaucomatous damage.

The diagnosis of bilateral symptomatic (“sub-acute”) angle closure was made, and medical treatment was given according to our institutional protocol. The treatment consisted of intravenous acetazolamide 500 mg and G pilocarpine 2%, in addition to G apraclonidine and G levobunolol in both eyes. The above treatment brought the left IOP down to 18 mm Hg but the right eye required argon laser iridoplasty to achieve pressure control. These treatments were followed by bilateral Nd:YAG laser iridotomies. She was discharged with IOPs of 16 mm Hg right, 14 mm Hg left and patent iridotomies, and was prescribed G pilocarpine 2% and G prednisolone 1% both to be used in both eyes four times a day. With the consent of her doctor, she also stopped her citalopram tablets.

In subsequent follow-up visits, the topical pilocarpine was stopped and up to 3 months later she retained open drainage angles with no peripheral anterior synechiae, patent iridotomies and IOPs in the range of 15–16 mm Hg. During the same period, she developed increasing symptoms of a chronic anxiety disorder and her doctors restarted her on imipramine 25 mg/day on 9 May 2006. Fortuitously, she had a glaucoma clinic appointment 2 days later, at which point she was found to have over 270° appositional angle closure despite patent iridotomies, and IOPs measured at 28 mm Hg right and 23 mm Hg left. She was put on pilocarpine 1% twice daily