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Sir,

Fine needle aspiration biopsy: an investigative tool for iris metastasis

A case report of a metastatic small cell carcinoma of the lung to the iris diagnosed by fine needle aspiration cytology is presented.

Case report

A 75-year-old woman, a known case of bilateral age-related macular degeneration, was referred to our clinic with a lesion on her right iris. She had previously received chemotherapy for small cell carcinoma of the lung. On examination the visual acuity was 6/9 in the right and counting fingers close to the face in the left eye. There was a raised amelanotic lesion at 3 o'clock on the pupillary border in the right eye (Fig. 1a). There was no ectropion uvea or any localised lens opacities. Fundus examination revealed multiple drusen in the right eye. The left eye had a disciform scar. Intraocular pressures were normal in both eyes. To determine the nature of the iris lesion, iris fluorescein angiography was performed which showed initial hypofluorescence followed by late hyperfluorescence (Fig. 1b, c). Ultrasound biomicroscopy showed a well-defined nodular lesion arising from the iris stroma (Fig. 1d). A diagnosis of an amelanotic iris melanoma/iris metastasis was made. In order to confirm the diagnosis a fine needle aspiration biopsy was performed which was consistent with small cell carcinoma of the lung. The patient was subsequently referred to the oncologist for further management. She died 2 months later.

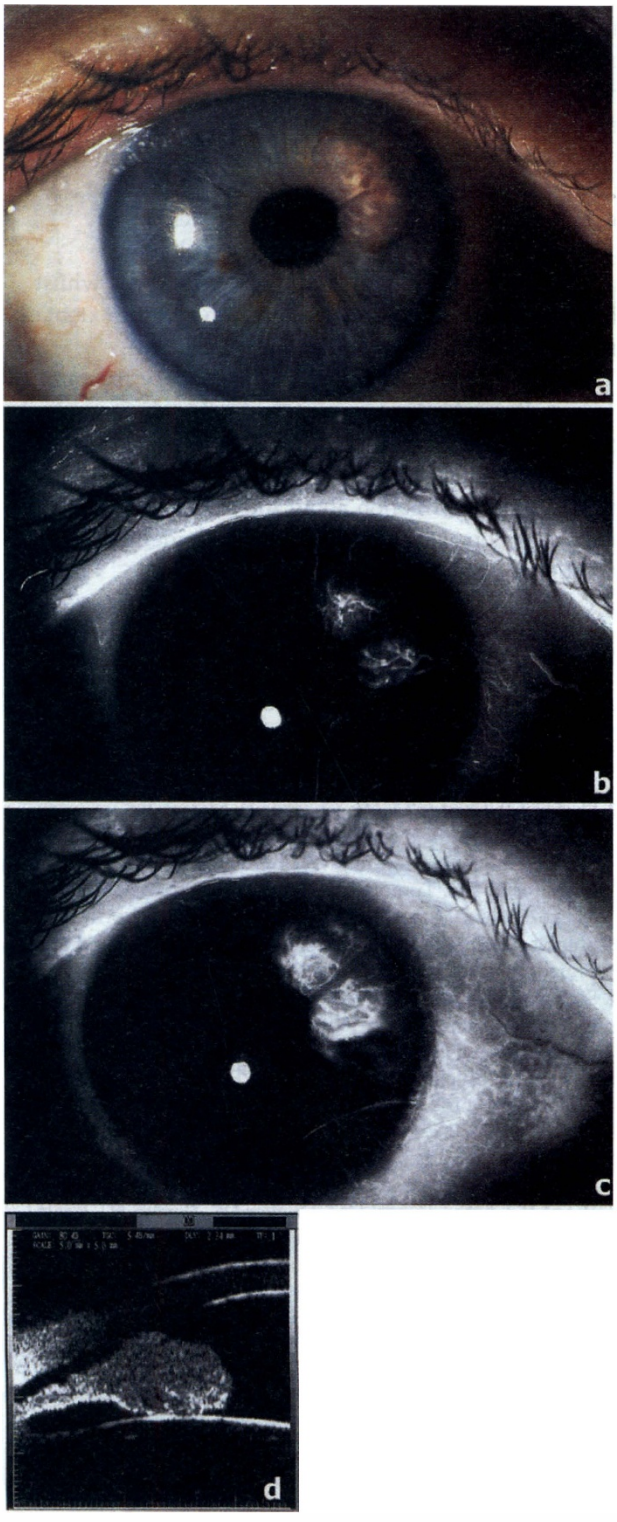

Fig. 1. *(a) Anterior segment photograph showing the lesion. (b) Anterior segment fluorescein angiogram showing early hyperfluorescence. (c) Anterior segment fluorescein angiogram showing late hyperfluorescence. (d) Ultrasound biomicroscopy showing the extent of the lesion.*

Comment

Ocular metastases are the most common intraocular tumour, with the uveal tract being the most common site of metastasis.[1–3] Microscopic intraocular lesions have been found in 5–10% of all patients dying of cancer.[1] Iris metastasis, a rare presentation of disseminated malignant disease,[4,5] commonly presents as a solid amelanotic mass in the inferior quadrant.[6] Iritis,[7] localised lens opacities, spontaneous hyphaema and glaucoma are the other presentations, making iris metastasis difficult to

differentiate from amelanotic melanoma. The primaries for iris metastasis include breast, lung, carcinoid, melanoma, colon, oesophagus, larynx, prostate, kidney,[5] uterus[8] and cervix.[9]

Various investigations are required to confirm the diagnosis. Fluorescein angiography of the anterior segment is a useful tool and shows the lesion as hypofluorescent in the early stages with late hyperfluorescence. Ultrasound biomicroscopy,[10] whilst confirming the solid nature of the lesion and the extent of any posterior (ciliary body) extension, cannot differentiate between primary and secondary tumours. Fine needle aspiration biopsy[11,12] was therefore required to establish the diagnosis.

This case illustrates that though non-invasive tests may provide information about the lesion a fine needle aspiration biopsy still remains one of the definitive investigations for any iris lesion.

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Sir,

Supraventricular ectopics and supraventricular tachycardia following injection of subconjunctival Mydricaine No. 2

Subconjunctival Mydricaine is commonly used in the management of acute anterior uveitis to provide mydriasis when topical treatments have failed. Mydricaine No. 2, being an unlicensed product, is not listed in the British National Formulary (BNF), Monthly Index of Medical Specialties (MIMS) or ABPI Data Sheet Compendium. This makes case reports within journals the main mode for identifying previously recorded side effects. We describe a case involving a patient with no previous cardiovascular history developing supraventricular ectopics, progressing to a supraventricular tachycardia following administration of subconjunctival Mydricaine No. 2. We are unaware of this complication being reported previously.

Case report

A 76-year-old man had been attending eye casualty for 2 weeks with a viral disciform keratouveitis affecting his right eye. He was receiving topical steroid having previously received a course of topical aciclovir. Visual acuities were: right eye 6/60, left eye, counting fingers. During follow-up review he was noted to have 2+ cells and flare in the anterior chamber and 360° posterior synechiae in the right eye. Dilatation was attempted using initially tropicamide 1%, then cyclopentolate 1% and finally atropine 1% drops. A period of 30 min was left between drops. Unfortunately mydriasis did not occur and a decision was made to give subconjunctival Mydricaine No. 2, 0.3 ml, to facilitate mydriasis and break the posterior synechiae.

The patient had no previous cardiac history and nothing to suggest contraindication to the Mydricaine injection. His pulse rate prior to injection was 80 beats/min and regular. Two minutes after administration of the subconjunctival Mydricaine No. 2 the patient complained of palpitations; there was no shortness of breath or chest pain. Cardivascular examination revealed an irregular pulse, with a rate of 110 beats/min. He was haemodynamically stable. An electrocardiogram (ECG) confirmed sinus rhythm and supraventricular ectopics at a rate of 100 beats/min (Fig. 1). Whilst undertaking the ECG the patient complained of breathlessness and was found at this stage to have a pulse rate of 200 beats/min, with the ECG showing a supraventricular tachycardia