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Sir,
Exposure to verteporfin and bevacizumab therapy for choroidal neovascularization secondary to punctate inner choroidopathy during pregnancy

A pregnant woman diagnosed with choroidal neovascularization (CNV) secondary to punctate inner choroidopathy was treated with verteporfin and bevacizumab, without fetal side effects.

A 24-year-old healthy myope presented with blurred vision in her right eye, with a visual acuity (VA) of 20/40 in the right eye and 20/25 in the left. Fundusoscopic findings revealed peripapillary chorioretinal plaques bilaterally, and an elevated grey subfoveal lesion RE. Fluorescein angiography confirmed right eye CNV and multiple punctate peripapillary and midperipheral hyperfluorescences.

After explaining the treatment options, she underwent PDT. Twelve days later, we were informed that β HCG levels and an ultrasound were consistent with a fourth week pregnancy, indicating exposure to PDT 1- to 2-week postconception. The patient was informed of possible risks related to her drug exposure.

Subsequently, right eye VA decreased to 20/70, and a thickened CNV was evident on FA with subfoveal fluid on OCT. After discussing treatment options, she underwent intravitreal injection of 1.25 mg bevacizumab (Avastin, Genentech, San Francisco, CA, USA) 3-month postconception. VA improved to 20/30, the macular lesion became a small atrophic scar, with stable OCT scans and VA throughout follow-up, until 3-month postpartum.

The pregnancy continued under observation. Two fetal ultrasounds were normal, and she delivered a healthy infant at term, without congenital anomalies then or at a 3-month follow-up examination.

A teratogenic effect of verteporfin exposure was found in rat fetuses at 40–125 times the human dose.¹ The risk of fetal exposure to activated verteporfin is smaller, and it is also not exposed to activating light. De Santis *et al*² reported verteporfin exposure in the first week postconception in a woman who had a healthy child.

Systemic bevacizumab is teratogenic in rabbits in doses twice the recommended intravenous human dose.¹ Our patient was exposed to intravitreal bevacizumab during the second trimester. Data from Genentech

concerning ranibizumab (~50 kD) revealed unmeasurable serum concentrations following intravitreal administration. This is expected to be even lower for the higher molecular weight bevacizumab. Nevertheless, minimal systemic absorption should be suspected, and although the drug could not cross the placenta barrier due to its high molecular weight (~149 kD), a theoretical effect on placental vasculature was kept in mind.³

Although exposed to verteporfin and bevacizumab, our patient and the fetus had no side effects. Obviously, verteporfin or bevacizumab treatment should be used with caution during pregnancy.

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Sir,
Fat-forming variant of solitary fibrous tumour of the orbit: the entity previously known as lipomatous haemangiopericytoma

The fat-forming variant of solitary fibrous tumour (SFT) previously known as lipomatous haemangiopericytoma is a distinctive soft tissue tumour composed of haemangiopericytoma-like areas interspersed with mature adipose tissue. Around 40 cases have been reported in the literature.¹ These tumours usually occur in deep soft tissue and only three orbital cases have been described.^{1–3}

Case report

A 49-year-old woman presented with acute left eye pain, epiphora, and proptosis. There was a history of thyroid eye disease and bilateral proptosis that had required orbital decompression and low-dose radiotherapy 6 years previously.

Figure 1 (a) The orbital mass was well circumscribed with pink and yellow areas. (b) Histology of the tumour displaying cellular areas with staghorn branching blood vessels (v) and variable amounts of fat (f). (H&E, original magnification $\times 40$). (c) On higher magnification, the tumour is composed of bland spindle-shaped cells with interspersed adipocytes (arrows). (H&E, original magnification $\times 400$). (d) On immunohistochemical staining, the tumour cells are positive for CD34 (CD34, original magnification $\times 40$).

On examination, there was proptosis of the left eye (displaced 10 mm anterior to the right). The visual acuity was 6/6 and colour vision was normal. There was no relative afferent pupil defect and visual fields were full.

A computerised tomography scan showed a 3.5 cm intraconal soft tissue mass with some heterogeneous attenuation displacing the globe anteromedially. The patient underwent excisional biopsy via a lateral orbitotomy.

The specimen consisted of a firm ovoid mass that on cut section displayed distinct yellow areas (Figure 1a). Microscopy showed a tumour composed of spindle-shaped cells with a prominent branching vascular pattern with lipomatous areas throughout the tumour (Figure 1b and c). Immunohistochemical staining was positive for CD34, CD99, and Bcl2 (Figure 1d). These features are characteristic of fat-forming variant of SFT. Postoperatively her proptosis resolved and her visual acuity is maintained.

Comment

Fat-forming variant of SFT is a rare tumour usually occurring in middle age. Almost all cases reported to date have behaved in a benign manner and no cases have recurred despite microscopic evidence of positive margins.^{1,2} However, it is important to be aware of this entity, which may be mistaken for well-differentiated liposarcoma, particularly in small biopsies.⁴

This tumour was recognised as a variant of SFT in a recent update of the World Health Organization (WHO) classification of soft tissues.⁵ This group of tumours is one of the more common orbital soft tissue tumours that show morphological similarities and an identical immunoprofile. Previously considered separate entities hamangiopericytoma and giant cell angiofibroma are now also included in this group and have been named cellular and giant cell-rich variants of solitary SFT, respectively.⁶

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Sir,
Bilateral hypopyon and vitritis associated with rifabutin therapy in an immunocompetent patient taking itraconazole

Uveitis is a rare complication of rifabutin therapy when given in conjunction with fluconazole and clarithromycin in patients with mycobacterium avium complex infection.^{1,2,3} Typically, these patients are immunocompromised and present with anterior uveitis, hypopyon, and occasionally, vitritis.⁴ The pathophysiology of this condition is unknown. We describe a case of bilateral, sequential rifabutin-associated uveitis (RAU) with severe vitritis in an immunocompetent patient taking rifabutin, itraconazole, and clarithromycin.

Case report

A 73-year-old man with chronic obstructive pulmonary disease complicated by mycobacterium avium complex infection and aspergillosis presented with painless, blurred vision OD. Current drugs included clarithromycin 500 mg b.d., rifabutin 300 mg o.d., and itraconazole 200 mg. These drugs were started at the beginning of November 2006.

BCVA was CF OD, 6/6 OS. There was 1 mm hypopyon, fine keratic precipitates, and severe vitritis. Retinal detail was not visible. The left eye was unremarkable. Endogenous endophthalmitis was suspected and vitreous biopsy with intravitreal voriconazole 100 mcg/0.1 ml and ceftazidime 2 mg/0.1 ml were performed. Postoperative drops were prednisolone 1% q.d.s. and cyclopentolate 1% b.d. No organisms were seen on microscopy or culture. BCVA improved from CF to 6/6 over 8 weeks. All signs of inflammation resolved. There was no evidence of any retinal or choroidal inflammation at any stage.

One day following discharge, the patient presented with an identical history and findings in the left eye as in the right eye and was managed in the same way. The outcome was the same.

Considering the history, a retrospective diagnosis of RAU was made.

Plasma rifabutin levels were elevated (Predose level 0.16 mg/l, 3-h postdose levels 0.44 mg/l and 0.73 mg/l on two separate occasions). Autoimmune markers were negative. Rifabutin and itraconazole administrations were discontinued. There was no recurrence of uveitis at 6 months.

Comment

RAU is well recognised in immunocompromised patients taking fluconazole and clarithromycin, but unusual in an immunocompetent patient taking itraconazole and clarithromycin. RAU responds well to topical steroids and/or cessation of rifabutin therapy. RAU should be considered in immunocompetent as well as immunocompromised patients with an appropriate pharmacological history. Itraconazole as well as fluconazole can be a predisposing feature in this condition.

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Sir,
UBM study in spontaneous bleb formation and blebitis after cataract surgery in Werner syndrome

Werner syndrome is a rare disorder characterized by premature ageing. It is associated with bilateral cataract. Impaired wound healing is a feature of this syndrome.¹

We reported a female who had presented with this rare disorder and undertook lensectomy and subsequent bleb formation and blebitis several years later. Ultrasound biomicroscopy (UBM) was carried out to evaluate the aetiology of bleb formation.