PostScript

LETTERS TO THE EDITOR

Isolated endogenous endophthalmitis secondary to *Nocardia* spp in an immunocompetent adult

Nocardia spp cause opportunist pulmonary, cerebral or soft-tissue infections and exogenous endophthalmitis. Endogenous endophthalmitis is rare, occurring as the result of haematogenous dissemination, and in association with underlying immunodeficiency. We present the case of a patient with endogenous nocardial endophthalmitis, diagnosed by histopathological characteristics on subretinal biopsy, in an immunocompetent host with no evidence of extraocular infection.

A 49-year-old man presented with a 9-day history of worsening vision and ophthalmic pain. A left-sided choroidal mass was visualised on funduscopy. The patient refused admission and returned 3 days later with retinal detachment and no perception of light in his left eye. No history of ocular trauma or surgery was seen. He had injected intravenous drugs 6 years ago, but was taking no regular drugs.

Investigations included an unremarkable blood film, immunoglobulins and complement, and negative HIV antibody. Hepatitis C antibody and RNA were positive. No other foci were found on chest *x* ray, echocardiogram or abdominal ultrasound. A computed tomography scan showed left-sided proptosis and preseptal periorbital soft-tissue swelling, with extension through the posterior margin of the globe.

Microscopy of the vitreal fluid showed a few leucocytes, but culture showed no growth. A subretinal fine-needle aspiration was carried out; haematoxylin and eosin staining showed a purulent aspirate containing proteinaceous material admixed with apoptotic and viable neutrophils. No granulomatous inflammation was identified. Grocott stain showed distinctive colonies (fig 1) of non-mycelial, beaded, filamentous organisms, branching at about 90°. They tested weakly Gram positive, weakly acid fast, positive on Wade–Fite stain and negative for periodic acid-Schiff. In the context of the distinct morphology and tinctorial stain characteristics, features were those of *Nocardia* spp. Prolonged culture showed no growth.

Intravenous trimethoprim–sulphamethoxazole was started, but the patient absconded after 3 days and could not be located. He presented again after 4 months, with resolution of systemic symptoms and ophthalmic pain. Visual acuity was unchanged. A computed tomography scan showed reduction in size of the left globe and resolution of preseptal soft-tissue swelling. It was decided not to start antibiotics again. No evidence of recurrence is seen in 6 months.

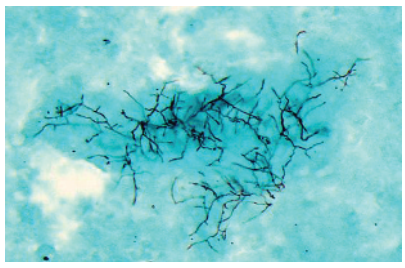

Figure 1 Distinctive colonies on Grocott stain.

Nocardial endophthalmitis usually occurs after ocular trauma or surgery.[1] Endogenous endophthalmitis, although rare, is associated with haematogenous dissemination from pulmonary or cerebral foci, and occurs in patients with underlying malignancy, HIV infection, immunosuppressive chemotherapy or prolonged corticosteroid treatment.[2 3] Only one case was previously reported of endogenous nocardial endophthalmitis, without extraocular infection, in an immunocompetent patient.[4] A potentially immunosuppressive role, however, of hepatitis C infection is a matter for speculation.

Nocardia spp have distinctive histopathological features, such as beading, branching at 90°, absent sulphur granules, weak acid-fast nature and positive Wade–Fite stain, which differentiate them from *Actinomyces* spp. Although *Nocardia* spp have been isolated from vitreal samples, the role of subretinal biopsy in establishing an early diagnosis has been highlighted.[2 5] This should be considered promptly in worsening endophthalmitis of unknown aetiology.

Finally, the outcome of this case despite minimal antibiotics is a point for discussion. Owing to the typical chronic course of infection, 6–12 months of trimethoprim–sulphamethoxazole is recommended.[5] Previous reports describe a poor prognosis with ocular nocardial infection, which often resulted in enucleation and death from extraocular foci.[2 3] Earlier reports have suggested that the mortality for localised pulmonary nocardiosis in previously healthy patients may be lower.[4] Our findings may support a similar pattern in localised ocular infection.

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Splenic marginal zone lymphoma with predominant red pulp involvement lacking p53 overexpression

Splenic marginal zone lymphoma (SMZL) is defined in the World Health Organization (WHO) classification as a B cell lymphoma

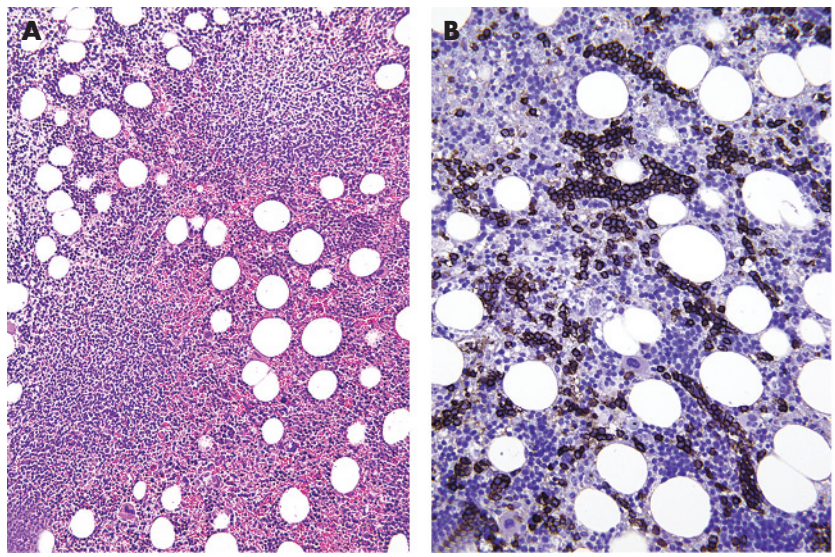

Figure 1 Photomicrography of bone marrow shows nodular and interstitial lymphoid infiltrates (A) with intravascular pattern highlighted by anti-CD20 immunohistochemical staining (B).