

Inflammatory Iris Nodule Mimicking Iris Tumour

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Iris nodules are rare findings in uveitis. Medically refractory sarcoid uveitis associated with iris nodule with neoplastic features has been reported. However, inflammatory iris nodule mimicking iris tumour with good medical response has not been reported. This report describes a patient with inflammatory iris nodule mimicking iris tumour who responded well to treatment.

Key words: Inflammation, Iris neoplasms, Uveitis

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Introduction

Iris nodules are rare findings in uveitis. The differential diagnosis of iris nodules with uveitis includes sarcoidosis, Vogt-Koyanagi-Harada syndrome, multiple sclerosis, Fuchs' heterochromic iridocyclitis, infectious uveitis, and neoplasm.¹ The differential clinical features of neoplastic iris nodules are pigmentary change, invasion of adjacent structures such as the anterior chamber, angle, and lens, surface haemorrhage, tumour vascularisation, and poor response to steroids. Medically refractory sarcoid uveitis associated with iris nodule with neoplastic features has been reported.^{2,3} However, inflammatory iris nodule mimicking iris tumour with good medical response has not been reported. This report describes a patient with inflammatory iris nodule mimicking iris tumour who responded well to treatment.

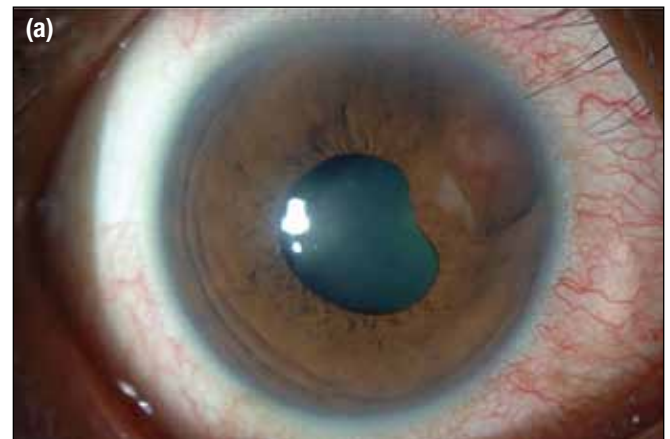
Case Report

A 44-year-old man was referred to the Department of Ophthalmology, Seoul National University College of Medicine, Seoul, Korea, in 2008 with visual disturbance in the right eye for the previous 2 weeks. The patient had a history of uveitis in the right eye 10 years previously, but had no other notable medical history.

The best-corrected visual acuity in the right eye was 20/40. The intraocular pressure was normal. Ophthalmic examination revealed ciliary injection, 3+ cells in the anterior chamber, a depigmented vascularised fleshy iris nodule, measuring approximately 2.5 x 1.7 mm, with focal exudative membrane and posterior synechiae in the upper nasal iris (Figure 1). Gonioscopy and funduscopy

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Figure 1. Anterior segment at presentation showing (a) ciliary flush and posterior synechiae at the upper nasal iris; and (b) a depigmented vascularised fleshy nodule in the superonasal iris and focal exudative membrane.



were normal. Ultrasound biomicroscopy (UBM) demonstrated an echogenic nodular lesion infiltrating the iris stroma with diffuse iris thickening (Figure 2).

Figure 2. Cross-section ultrasound biomicroscopy images at presentation showing an echogenic nodular lesion infiltrating into the iris stroma with diffuse iris thickening. (a) Horizontal; and (b) nasal vertical.

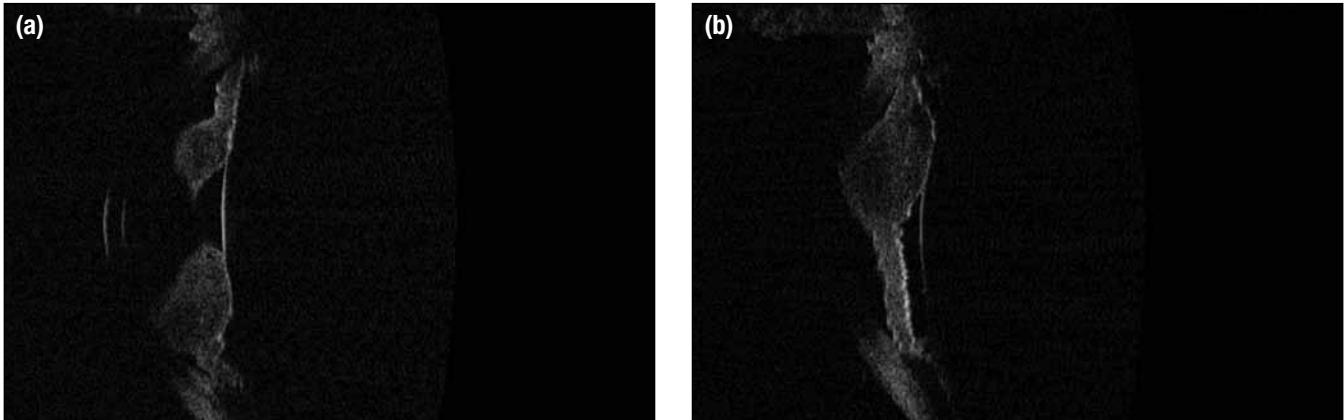


Figure 3. Anterior segment after 2 weeks of topical steroid treatment showing the disappearance of (a) ciliary injection; and (b) iris nodule.

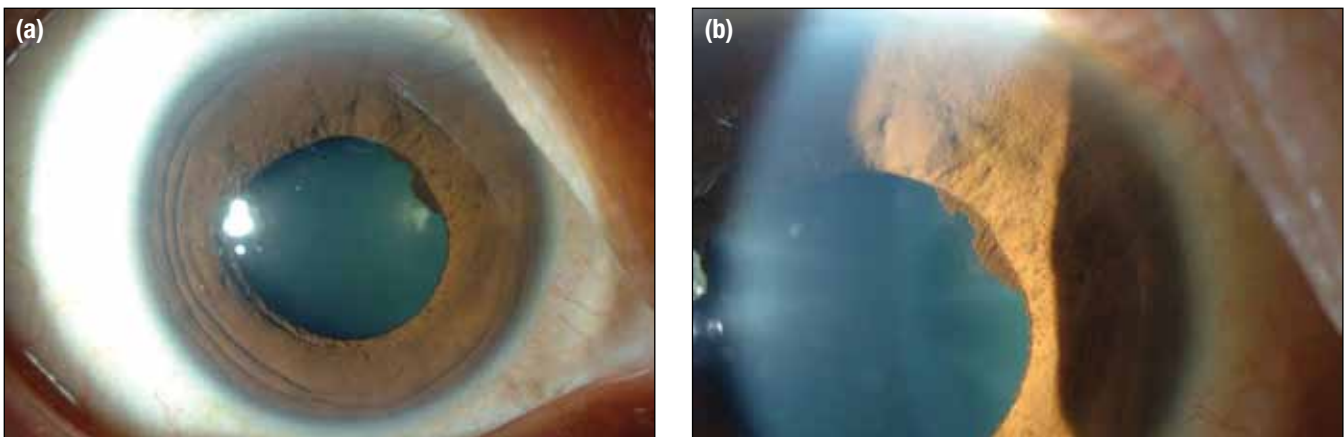
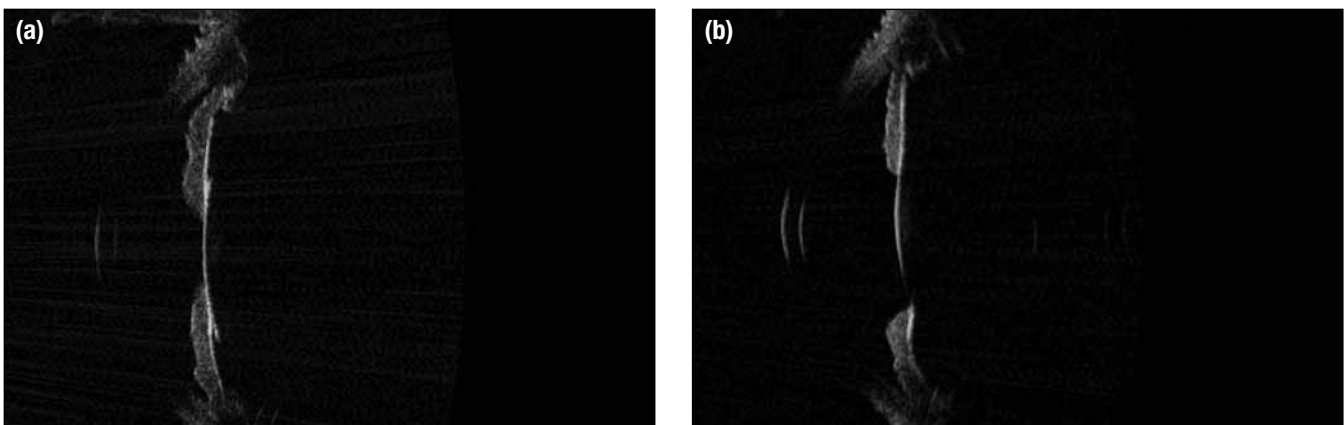


Figure 4. Cross-section ultrasound biomicroscopy images after 2 weeks of topical steroid treatment showing the disappearance of iris nodule and thickening. (a) Horizontal; and (b) nasal vertical.



Suspecting an iris neoplasm with uveitis, the patient underwent a screening test for uveitis and magnetic resonance imaging (MRI) of the orbit and brain to evaluate the iris nodule and possible metastasis. Iris biopsy was planned and the patient was prescribed prednisolone acetate 1% 4 times daily and homatropine hydrobromide 2% twice daily to control inflammation.

After 2 weeks, the patient's vision improved to 20/22. Ophthalmic examination revealed a clear anterior chamber and no conjunctival injection, ciliary flush, iris nodule, or exudative membrane (Figure 3). UBM showed disappearance of the iris nodule and thickening (Figure 4). The results of screening for uveitis were unremarkable. The orbit and brain MRI were normal. Therefore,

the iris biopsy was cancelled. After 24 months, there has been no recurrence of iris nodule or uveitis.

Discussion

The differential clinical features of neoplastic iris nodules are pigmentary changes, invasion of adjacent structures such as the anterior chamber, angle, and lens, surface haemorrhage, tumour vascularisation, and poor response to steroids.⁴ Thorough review of the systems, medical history, and laboratory tests can provide important information for diagnosis. Despite this help, invasive procedures such as anterior chamber paracentesis, vitreous sampling, or iris biopsy may be needed to confirm the diagnosis.

For this patient, the clinical impression at presentation was of a primary tumour of the iris or a metastatic iris tumour because of the depigmented fleshy vascularised features. As a biopsy of the iris nodule was not performed, the aetiology of the nodule cannot be confirmed for this patient. However, the iris nodule and uveitis responded rapidly to topical steroids, suggesting an inflammatory cause rather than a neoplastic cause.

Biopsy-proven sarcoid uveitis, an ocular inflammatory disorder, with an iris nodule similar to this patient has been reported.^{2,3} However, this patient's response to medical treatment was different. Some authors have suggested that inflammatory iris nodule usually does not have a good steroid response because the inflammation is not merely an accumulation of inflammatory cells, but can act as a focus of continued inflammatory cytokine production and a reservoir of immune active cells.³ This patient had a large

inflammatory nodule and responded well to steroid treatment, thus, this is an unusual presentation.

A patient with iris nodules associated with Langerhans cell histiocytosis (LCH) who had a good response to topical steroids has been reported.⁵ However, the patient had a history of LCH with systemic symptoms such as nausea, vomiting, and fever. This patient had no systemic symptoms and no other previous notable medical history. Moreover, considering the age of the patient and the rare incidence of LCH, this patient's symptoms could not be explained by LCH.

This case suggests that inflammatory iris mass may have characteristic features of neoplastic mass and a rapid response to steroid. Therefore, before planning excisional biopsy for iris mass, the possibility of an inflammatory mass and good steroid response must be considered.

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