

LETTER TO THE EDITOR

Primary iris stromal cyst with pseudohypopyon: an atypical presentation

EDITOR.—Primary iris stromal cysts usually present as asymptomatic cysts arising from the iris. Gradual enlargement of the cyst may lead to visual impairment and secondary glaucoma necessitating intervention.¹⁻⁴ We report a case of iris stromal cyst in a girl with a pseudohypopyon.

CASE REPORT

A 14 year old girl was referred to the ocular oncology service with a 3 week history of haemorrhage on the left iris followed by a rapidly increasing lesion at the same site. There was no history of ocular trauma. The patient was medically fit and was not taking any systemic or topical medication.

Ocular examination revealed a visual acuity of 6/6 in the right eye and 6/9 in the left eye. The right eye showed no abnormality. Examination of the left eye showed a thin walled cystic lesion on the iris in the nasal quadrant measuring 6.5 mm by 7.5 mm. The cyst contained yellowish material resembling a hypopyon (Fig 1). The anterior chamber did not show any signs of inflammation or hyphaema. The remainder of the examination was normal. The intraocular pressure on presentation was 18 mm Hg in both eyes. An ultrasound biomicroscopy (UBM) was performed which confirmed the cyst to be arising from the superficial stroma with considerable thinning of the underlying iris (Fig 1c). Anterior segment fluorescein angiography showed leakage from the vessels at the base of the cyst (Fig 1b).

In view of the size of the cyst and to assess the nature of the apparent hypopyon, a fine needle aspiration was performed. The aspirate was reported to be sterile (acellular) with high protein content. The girl was subsequently followed for a period of 3 months wherein she remained asymptomatic. The cyst gradually regressed spontaneously. She presented again after 4 months complaining of painful red left eye. Examination showed no activity in the anterior chamber; however, the contents of the cyst now showed cells. The patient was prescribed topical steroids, which led to resolution of symptoms. No surgical intervention was undertaken at this stage. The cyst gradually enlarged over the next 3 months and a decision was made to treat it with YAG laser

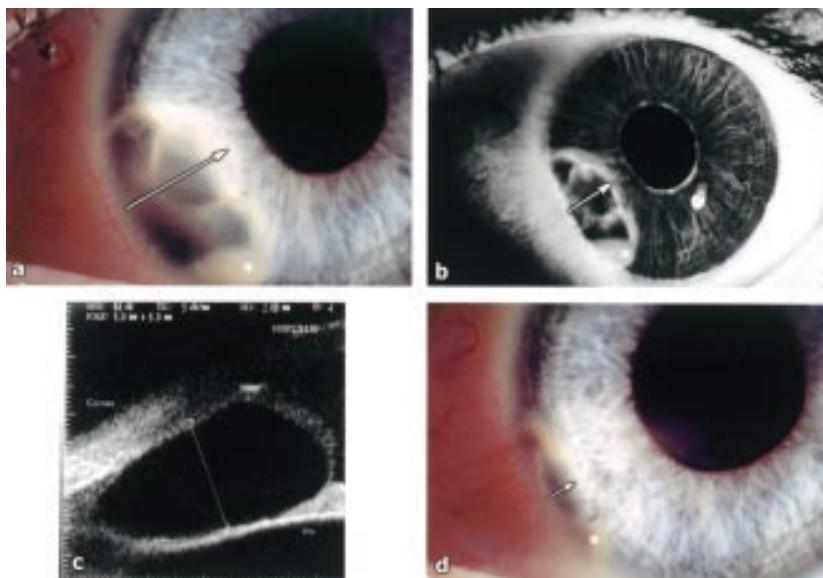


Figure 1 (a) Iris stromal cyst at first presentation with the asterisk representing the pseudohypopyon and the arrow indicating the radial extent of the cyst. (b) Anterior segment fluorescein angiography showing leakage with the asterisk representing the pseudohypopyon and the arrow indicating the radial extent of the cyst. The white spot at 4 o'clock is an artefact. (c) Ultrasound biomicroscopy of the cyst showing origin from superficial stroma. The cornea and iris have been labelled and the cursor indicates the anteroposterior extent of the cyst. (d) Resolving cyst after YAG laser treatment with the asterisk representing the pseudohypopyon and the arrow indicating the radial extent of the cyst.

(Fig 1d). This was uneventful other than 1+ cells in the anterior chamber which settled with topical steroids. However, the cyst recurred after 4 months and gradually enlarged over 3 years necessitating further YAG laser treatment. This led to the resolution of the cyst and now 7 years after her initial presentation she is asymptomatic with a visual acuity of 6/6 bilaterally.

COMMENT

This report illustrates a case of a primary stromal iris cyst presenting with a pseudohypopyon. Primary iris stromal cysts are rare.¹ These are more commonly seen in children¹ and are usually asymptomatic. Gradual increase in size can lead to visual impairment and secondary glaucoma.³ They are also one of the rare causes of amblyopia.³ Location of the cyst as seen clinically and by UBM, along with absence of a history of trauma, intraocular surgery, or medication helped us establish a diagnosis of a primary stromal cyst. Presence of a pseudohypopyon as seen in this case has not been described previously. Breakdown of the blood-aqueous barrier around the cyst could have resulted in the hypopyon.

The leakage of the vessels at the base of the cyst confirms the blood-aqueous barrier breakdown.

Although spontaneous resolution of these cysts has been reported,³ treatment options in

an event of secondary complications include needle aspiration,^{3,6} cryotherapy, xenon arc photocoagulation, injection of chemical substances, or electrolysis. Recurrence is not uncommon following treatment.^{3,7,8}

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