SHORT COMMUNICATION

Case report

Organized vitreous hemorrhage masquerading as an optic disc melanocytoma

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PURPOSE. To present a case of organized vitreous hemorrhage masquerading an optic disc melanocytoma.

DISCUSSION. Optic nerve head melanocytoma is a benign slightly pigmented lesion arising from the edge of the disc presenting with a filed defect. Pigmented nature of the lesion in question due to presence of haemosidrin laden macrophages led a diagnostic dilemma. Trans vitreal biopsy confirmed the diagnosis.

CONCLUSIONS. Althought classical in presentation organized blood clots can masquerade a number of lesions including a melanocytoma as in the present scenario. (Eur J Ophthalmol 2003; 13: 215-7)

Key Words. Viteours haemorrhage, Melanocytoma, Trans vitreal biopsy, Haemosidrin, Macrophages

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We present a case of an organized hemorrhage presenting as a mass in front of the disc causing a diagnostic dilemma.

Case report

A 36 year old aphakic gentleman was referred to the oncology unit for an opinion regarding a peculiar optic nerve head lesion in his left eye. The patient had undergone a buckling procedure followed by a vitrectomy and fluid gas exchange for management of detached retina. He subsequently developed vitreous hemorrhage and a secondary staining of the lens for which he underwent lensectomy and vitrectomy. Following this, a pigmented nodular lesion arising from the optic disc was detected.

On presentation his best-corrected visual acuity was 6/6 in the right and 6/12 in the left eye. On examination the anterior segment of both eyes was normal. Fundoscopy revealed a deeply pigmented lobulated

mass with a slight cystic appearance arising from the left disc (Fig. 1, 2). Fundus fluorescein angiography failed to show leakage from the lesion. Ocular B scan confirmed that the lesion was situated on the disc but did not appear to actually infiltrate the disc (Fig.3). A working diagnosis of either a thrombosed optic disc haemangioma or an optic disc melanocytoma was made. However possibility of an organized blood clot was not ruled out. The patient was subsequently observed for 3 months; during this period the lesion did not appear to change in shape or size. To resolve the diagnostic dilemma a transvitreal biopsy was planned. During the biopsy the mass dislodged from the disc and was removed. The histological analysis reveled that the lesion consisted of confluent areas of altered blood, admixed with a small number of macrophages containing haemosidrin, and some retinal pigment epithelial cells. These areas were bounded by a thin outer "capsule" consisting of retinal pigment epithelial cells and fibroblast like cells with a sparse collagenous matrix.



Fig. 1 - Fundus photograph showing the lesion on the optic disc.



Fig. 2 - Red free fundus photograph showing the lesion on the optic disc.



Fig. 3 - Ultrasound B scan of the left eye.

There were no identifiable blood vessels. The appearance suggested the organization of a local area of haemorrhage, principally involving metaplastic retinal pigment epithelial cells, however there was no evidence of neoplasia.

DISCUSSION

Optic nerve melanocytoma is a benign, highly pigmented lesion seen in the age group of 30 to 40 years resulting in enlargement of the blind spot (1-5). Nerve



Fig. 4 - Histology of the lesion showing confluent areas of altered blood admixed with a small number of macrophages containing haemosidrin and some RPE cells.

bundle defects with a nasal step are also known (4, 5). Fundus evaluation reveals a slightly elevated pigmented lesion arising from the edge of the disc. The involvement of the disc may be partial or total. The lesion is usually static but has been documented to grow in 15 percent of cases. An increase in their size raises suspicion of malignant transformation (1-3, 6). Organized vitreous hemorrhage although known to masquerade as a number of lesions (7, 8), usually presents as organized mass in the vitreous, however its presentation as an organized hemorrhage as in the present case is exceedingly rare. The pigmented nature of the lesion resulting from accumulation of haemosidrin laden macrophages and proliferation of melanocytes and its presence on the disc caused a diagnostic dilemma. The mass however was better defined; less pigmented and did not show the feathery extensions into the choroids as seen in a melanocytoma. A transvitreal biopsy and the histological analysis clinched the diagnosis. Reprint requests to: P. Puri, MD Department of Ophthalmology Royal Hallamshire Hospital Glossop Road Sheffield S10 2JF - UK

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