A LESION MISTAKEN FOR MALIGNANT MELANOMA OF THE POSTERIOR UVEA: A CASE REPORT

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SUMMARY

A case is presented to illustrate the difficulties encountered in the clinical diagnosis of an intraocular mass. The fundus was not visible ophthalmoscopically because of opaque media. The anterior surface of the iris showed three discrete hyperpigmented nodular patches. Ultrasound showed an intraocular mass occupying half the posterior segment. The eye did not have useful vision and was enucleated after a clinical diagnosis of malignant melanoma of the choroid was made. The eye did not contain a melanoma but an organised blood clot after an extensive vitreous haemorrhage because of systemic hypertension.

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INTRODUCTION

The treatment of a blind eye with an opaque media presents a serious problem. Should the eye remain and the patient be kept under observation, or should it be enucleated because of possible danger of a hidden neoplasm? This is further complicated if investigations reveal an intraocular mass of undetermined origin. The following case report highlights the problem.

CASE HISTORY

A 36-year-old patient developed periodic right ocular pain since June 1983. He was diagnosed and treated for glaucoma of the right eye. His vision progressively deteriorated. In January 1984, he suddenly developed severe pain, swelling and marked deterioration of vision of the affected eye. He was seen at the University Hospital in late January 1984. On examination, he had marked right proptosis with swelling of the lids, corneal oedema and severe restriction of ocular movements. His intraocular pressure was 70 mmHg and the visual acuity was reduced to perception of light with poor projection. No view of the anterior chamber was possible because of corneal oedema. An ultrasound of the orbit showed a solid mass occupying half the posterior segment (Fig. 1). The patient also had severe hypertension of 200/140 mm of Hg which he was not aware of With intensive anti glaucomatous treatment, the intraocular pressure

dropped to 30mm Hg; no further drop was noted for the next one week despite vigorous treatment. The corneal oedema decreased slightly. The anterior chamber and the iris were faintly visible. There was hyphaema in the anterior chamber. On the anterior surface of the iris, there were three discrete hyperpigmented nodular growths. There was no view of the fundus because of the opaque lens. A diagnosis of a malignant melanoma of the choroid resulting in secondary glaucoma and metastases to the iris was made. The eye was enucleated. The globe was found to be much larger than normal, making the conjunctiva paper thin. The sclera was also thin, and laterally a small hyperpigmented area was noticeable. Histopathology showed a mass, which was a huge organised blood clot occupying half the posterior segment (Fig. 2), with no evidence of melanoma. The post-operative diagnosis was massive vitreous haemorrhage resulting in organised clot probably due to severe hypertension, causing secondary glaucoma.

DISCUSSION

There are many intraocular lesions which simulate a malignant melanoma of the posterior uvea. Where the fundus is ophthalmoscopically visible, these

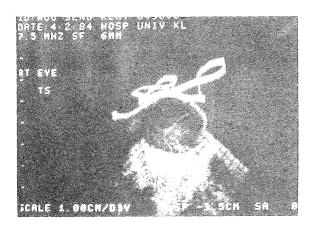


Fig. 1 Transverse Compound B scan through the closed lid using Technicare EDP 1200 S (general purpose) scanner with a 7.5 MHz transducer. The posterior portion of the globe is filled with a wellcircumscribed, accoustically complex mass: a single 'septum' is present and the gross structure of the globe is preserved. The appearance is nonspecific and could be due either to an haematoma or an intraocular tumour.

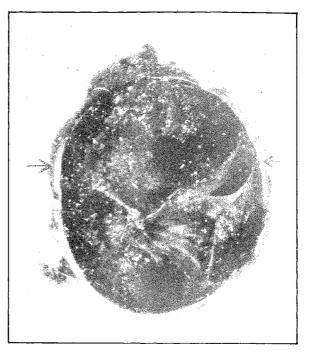


Fig. 2 Huge Blood Clot.

lesions can be visibly assessed with a certain degree of certainty. In the studies carried by Makley and Teed,¹ among the most frequent clinical diagnosis other than the suspected neoplasms were detached retina and intraocular haemorrhage. Although detached retina is practically always present in eyes with malignant melanoma of the choroid, it was undetected in this cause because of the opaque media. Though there is less chance that a blind eye in a patient under 50 years of age would harbour a malignant melanoma,² there are cases reported in patients between the ages of 10 90 years.¹ In Negroes, intraocular melanomas are extremely rare, and a blind eye with opaque media even if it were painful would not have the same connotation that it does in other persons.¹ In this case, as the eye was blind and painful and the tension was elevated, the patient was advised enucleation. One eye in every five that had been removed with the clinical diagnosis of malignant melanoma of the posterior portion of the uvea, did not actually contain a melanoma.³ Some cases of malignant melanoma of the choroid pose little or no problem in diagnosis. However, in an opaque media, after all available diagnostic procedures have been used, only a

decision for enucleation then must be on clinical judgement and consideration of the risk involved in watchful waiting. Even if the media was clear and the REFERENCE lesion was ophthalmoscopically visible, the clinical diagnosis was incorrect at an average of about 19% in Jerry's series out of the total of 13,766 enucleated eyes.³

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presumptive clinical diagnosis can be made. The photographs and Ms T.C. Yap for her secretarial work.

- 1 Makley Terrence A Jr, Teed Roy W. Unsuspected Intraocular malignant melanoma. A.M.A. Archives of Ophthalmology 1958; 60:475-478.
- 2 Trevor-Roper Patrick D. The eye and its disorders. Oxford: Blackwell Scientific Publications, 1974;586-592.
- з Shields Jerry A, Zimmerman Lorenz E. Lesion stimulating malignant melanoma of the posterior uvea. Archives of Ophthalmology, 1973; 89:466-471.