· Case report ·

An unusual presentation of an orbital schwannoma due to intratumoural haemorrhage

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Received: 2010-03-19 Accepted: 2010-05-31

Abstract

- AIM: To report an unusual presentation of a rapid increase in size of an orbital schwannoma secondary to intratumoural haemorrhage.
- METHODS: A case report.
- RESULTS: A 79-year-old male patient had a 2 year history of a slow-growing lump over the medial aspect of his left upper eyelid. The lump had further increased in size recently. An incision biopsy was undertaken. However, during the following 4 weeks, the mass rapidly grew in size and had reduced his vision in the left eye to 6/18. He was referred to the orbit service for further management. On examination, he had a large mass emerging from the supero-medial aspect of his orbit. He had mechanical ptosis and the globe was displaced inferolaterally. Eye movements were limited in the left eye, especially in upgaze. A CT scan demonstrated an extraconal mass in the medial aspect of the left orbit. A left anterior orbitotomy with excision biopsy of the mass showed a well encapsulated mass. Histological examination demonstrated a schwannoma with cystic changes and thrombosed blood vessels. The patient had an uneventful postoperative course. Postoperatively his vision improved to 6/6 and he no longer experienced diplopia.
- CONCLUSION: Our case emphasises the point that orbital schwannomas should be regarded as an important differential diagnosis for a slow growing tumour, but the rapid growth, of a previously presumed benign tumour, which can make it highly suspicious for malignancy or inflammation, could also represent intratumoural haemorrhage.
- KEYWORDS: schwannoma; orbit; haemorrhage DOI: 10.3969/j. issn. 1672-5123.2010.06.005

Joshi L, Mehta P, Bhargava J, Durrani OM. An unusual presentation of an orbital schwannoma due to intratumoural haemorrhage. Int J Ophthalmol(Guoji Yanke Zazhi) 2010;10(6):1039-1040

INTRODUCTION

S chwannomas, accounting for less than 1% of orbital tumours, usually present as benign slow growing tumours. We report an unusual presentation of a rapid increase in size of an orbital schwannoma.

CASE REPORT

A 79-year-old male patient had a 2 year history of a slow-growing lump over the medial aspect of his left upper eyelid. He was otherwise asymptomatic. The lump had further increased in size recently. An incision biopsy was undertaken. However, during the following 4 weeks, the mass rapidly grew in size and had reduced his vision in the left eye to 6/18. He was referred to the orbit service for further management. On examination, he had a large mass emerging from the superomedial aspect of his orbit (Figure 1). The overlying skin was necrotic in the centre, with surrounding oedema. He had mechanical ptosis and the globe was displaced infero-laterally. Eye movements were limited in the left eye, especially in upgaze. There was no evidence of optic nerve swelling or choroidal folds.

A CT scan demonstrated an extraconal mass in the medial aspect of the left orbit (Figure 2).

Left anterior orbitotomy with excision biopsy of the mass showed a well encapsulated mass (Figure 3). Histological examination demonstrated a schwannoma with cystic changes and thrombosed blood vessels.

The patient had an uneventful postoperative course (Figure 4). Postoperatively his vision improved to 6/6 and he no longer experienced diplopia.



Figure 1 Colour photograph showing a large left superomedial mass with erythema and necrosis of the overlying skin and oedema of the surrounding soft tissue.

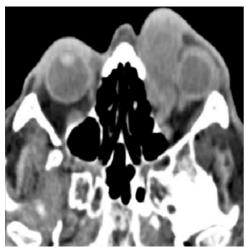


Figure 2 Axial CT scan image showing a large lobulated, solid extraconal mass in the medial part of the left orbit extending posteriorly upto the apex. The mass measured $47\,\text{mm} \times 29\,\text{mm}$. The mass was homogenous with no significant enhancement post contrast.

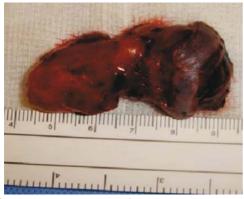


Figure 3 Well encapsulated excised mass.

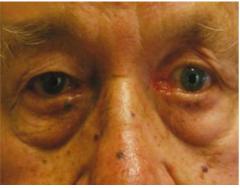


Figure 4 Nine month postoperative photograph.

DISCUSSION

Schwannomas are benign tumours of the nerve sheath arising from Schwann cells in the peripheral nervous system^[1,2]. The atypical presentation of rapid growth in our case may have been due to intratumoural haemorrhage that could have occurred after the initial biopsy. There have been only 2

reported cases of rapidly growing orbital schwannomas, which occurred during pregnancy $^{[3,4]}$. Some schwannomas are very vascular thus making them more vulnerable to intratumoural haemorrhage $^{[5]}$.

Our case emphasises the point that orbital schwannomas should be regarded as an important differential diagnosis for a slow growing tumour, but the rapid growth, of a previously presumed benign tumour, which can make it highly suspicious for malignancy or inflammation, could also represent intratumoural haemorrhage.

REFERENCES

- 1 Jacobiec FA, Front RL. Peripheral nerve sheath tumors. In: Spencer WH, ed. Ophthalmic Pathology: An Atlas and Textbook, Vol. 3, Philadelphia: W. B. Saunders, 1986;2616-2626
- 2 Shields JA, Shields SL, Scartozzi R. Survey of 1264 patients with orbital tumors and simulating lesions; the 2002 Montgomery Lecture, part 1. *Ophthalmology* 2004;111(5):997-1008
- 3 Chang BY, Moriarty P, Cunniffe G, Barnes C, Kennedy S. Accelerated growth of a primary orbital schwannoma during pregnancy. $Eye\ 2003\ ; 17(7)\ ; 839-841$
- 4 Sugo N, Yokota K, Nemoto M, Hatori T, Kano T, Goto S, Seiki Y. Accelerated growth of an orbital schwannoma during pregnancy. *J Neuroophthal* 2007; 27 (1):45-47
- 5 Kachhara R, Devi CG, Nair S, Bhattacharya RN, Radhakrishnan W. Acoustic neurinomas during pregnancy: report of two cases and review of literature. *Acta Neurochin (Wien)* 2001;143(6):587-591

肿瘤内出血导致眼眶神经鞘瘤暴露 1 例

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摘要

目的:报告1例肿瘤内出血导致的眼眶神经鞘瘤迅速增大 暴露于皮肤表面的患者。

方法:病例报告。

结果:患者,男,79岁,左侧上眼睑内侧有一个缓慢增长2a的肿物,近期肿物迅速增大。切取一部分活组织进行检查。4wk后,左眼肿物继续增大,视力则下降为6/18。检查发现肿物位于左眼眼眶鼻上方,眼睑呈机械性下垂及眼球受压向下外方移位。左眼眼球运动受限,向上注视时尤为明显。CT扫描显示在左眼内侧有巨大肿物突出。左眼前径路眶切开术活检显示包膜完整。组织学检查显示神经鞘瘤囊性改变和有血管血栓形成。患者手术顺利。术后视力提高至6/6和没有复视现象出现。

结论:眼眶神经鞘瘤应作为一个重要与缓慢增长的肿瘤鉴别诊断,但快速增长的良性肿瘤也可以因为肿瘤内出血而高度怀疑恶性肿瘤或炎症。

关键词:神经鞘瘤;眼眶;出血