Title: Painful vertical diplopia as a presentation of a pituitary mass

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Author's response to reviews: see over


Re: MS 8318410701105414

Painful vertical diplopia as a presentation of a pituitary mass
Shveta Bansal, Kaveri Mandal and Ahmed Kamal

18 December 2006

Dear Sir/Madam,

Many Thanks for the suggested changes to the manuscript. I have attached a response letter to each reviewer with a point by point description of the changes we have made. In addition the revised manuscript is also enclosed.

We have also made the following editorial changes:

1. An acknowledgments section has been included with the phrase "Written consent was obtained from the patient or their relative for publication of study".

2. An authors contribution section has been added before the acknowledgments section.

Many thanks again for your assistance in improving our paper. Please let me know if I can be of any further assistance.

Best Wishes

Shveta Bansal
Response to Reviewer 1

Title: Painful vertical diplopia as a presentation of a pituitary adenoma
Date: 18 December 2006

Many Thanks for your interest in our paper. We have addressed the points you suggested as follows:

Major Compulsory Revisions

1. A Coronal MRI scan has been added as requested. Also, in the manuscript we have clarified that there was no evidence on imaging of intracerebral aneurysm or invasion of the cavernous sinus, (Section, Case Report; paragraph 2).

2. Addition to Section Case Report, last paragraph: “Finally, the possibility of a coincidental pituitary tumour and a spontaneously recovering micro-infarctive third nerve palsy must also be considered.”

Minor Essential Revisions

3. The mechanism of how the pituitary tumour compromises the vascular supply of the oculomotor nerve. A detailed description of the blood supply to the oculomotor nerve is beyond the scope of this paper. I have however made the following addition to the article: “Rapid onset of third nerve paralysis has been attributed to compromise of the vascular supply to the nerve [4], due to compression of the vasa nervorum originating in the internal carotid artery [5].” (final paragraph, Discussion)

4. The description of the tumour size has been checked with the consulting radiologist and the following amendment has been made to the text, paragraph 2 Case Report: “MRI of the orbits revealed no muscle or tendon abnormality but an incidental pituitary lesion was identified. Further intracranial imaging delineated a pituitary mass compressing the chiasm which showed ring enhancement with contrast studies, measuring 1.72cm x 1.28cm x 1.29 cm (figure 2).”

Thanks again for your suggestions which have greatly helped in improving our paper. Please let me know if I can be of any further assistance.

S Bansal
Response to Reviewer 2

Title: Painful vertical diplopia as a presentation of a pituitary adenoma

Date: 18 December 2006

Many thanks for your interest in our paper. We have considered your comments and re-evaluated our findings. Further discussions with other consultants involved in the management of this case have led us to revise our paper as follows:

Major Compulsory Revisions

1. The values for the pituitary hormone metabolic work up have been added to the Case Report section: Free T4 14.2 pmol/L, Free T3 5.9 pmol/L, TSH 1.48 mu/L, Prolactin 446 mIU/L, Testosterone 1.7 nmol/L, FSH 13.0 iu/L, LH 6.4 iu/L, Growth Hormone 1.19 mIU/L, IGF 1 22 nmol/L.

Upon review of the biochemical and hormonal profile, we found there was no record of ACTH and Cortisol. These tests were requested by the neurologists however could not be processed due to receipt of an incorrect blood sample.

2. We read the suggested report by Brisman et al and have mentioned as an adjunct the possibility of resolution of symptoms with bromocriptine in cases of pituitary apoplexy presenting with a rapid onset third nerve palsy. (Section Discussion, final paragraph): “In the latter case, immediate treatment with bromocriptine and steroids has been advocated, on the basis that most macroadenomas are prolactinomas [7]”

3. The nature of the tumour – after further discussions with the radiologists and histopathologists involved in this case we have revised our diagnosis of the nature of the lesion. Although this was suspected to be a cystic macroadenoma based on the imaging reports, histological analysis was unable to confirm a single diagnosis. Possible differentials are given including an epidermoid cyst, dermoid cyst and teratoma. We have been advised also that further immunohistochesmical tests would be of no benefit on reaching a conclusion. What appears to be certain however is that the lesion is a benign midline mass. Our manuscript has been amended as follows:

“Although initially a diagnosis of a macroadenoma or craniopharyngioma was suspected, further histological analysis revealed a benign squamous epithelium lined lesion which was could be consistent with an epidermoid
cyst, dermoid cyst or a teratoma. There were no signs of infarction or haemorrhage.”

We would like to stress that the aim of this case report is to highlight an unusual presentation of a midline pituitary mass, regardless of the histopathological features of the lesion.

4. 2. A coronal MRI scan has been added as requested

Once again, we would like to thank you for your comments which have greatly aided us in improving our paper.

Please let me know if I can be of any further assistance

S Bansal