Reviewer's report

Title: Isolated Sixth Cranial Nerve Palsy as the Presenting Symptom of a Rapidly Expanding ACTH Pituitary Adenoma: Case Report

Version: 1 Date: 29 October 2010

Reviewer: Ronald Benveniste

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This case report describes an unusual presentation and posttreatment course of an corticotroph pituitary adenoma. The tumor initially presented with an isolated, unilateral 6th nerve palsy, which progressed suddenly to complete ophthalmoplegia. Her tumor regrew after surgery and required a second operation and radiosurgery.

This is an interesting case report for several reasons, but I recommend minor essential revisions prior to acceptance for publication, as these details would be very helpful for those of us reading the report who take care of patients with pituitary adenomas.

1. It would be interesting to know if this patient with sarcoidosis had been taking steroids before her diagnosis, and if steroids had been discontinued or the dose had been changed. Did her sarcoidosis worsen after the tumor was treated?

2. Were preoperative and postoperative ACTH and/or cortisol levels available? It is unclear if this is a hormone secreting or "silent" corticotroph adenoma; there is some evidence that "silent" corticotroph adenomas are associated with a more aggressive clinical course as compared with nonfunctioning adenomas. A few references could be cited in the Discussion section.

3. What visual loss did the patient have preoperatively? Loss of acuity and/or visual fields, or just ophthalmoplegia?

4. What were the intraoperative findings? Even if there was no hemorrhage, did the tumor appear necrotic, which might be an explanation for the rapidly progressing symptoms? Was there extension into the cavernous sinus?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.