

55th ANNUAL DIAGNOSTIC SLIDE SESSION 2014.

CASE 2014-02

Submitted by:

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Clinical History:

The patient is a 74 year old female with a skull base tumor. She underwent resection of what was reported to be a pituitary adenoma, evaluated at an outside hospital 16 years ago, underwent radiation therapy and had reportedly done well in the interim while receiving intermittent follow up. However, several months before presentation last year, she had mild bitemporal hemianopsia, slowly progressing right cheek numbness, chronic rhinosinusitis, and deviated nasal septum. Examination of CT scan revealed a 4.3 cm mass centered in the sphenoid sinus eroding right sphenoid bone, invading and extending beyond the sella, infiltrating muscle and the right carotid canal wall. Due to having a pacemaker, the patient was unable to undergo MRI which limited evaluation to some degree. The lesion was in the previous radiation field and beyond. Radiographically it was uncertain if the current lesion was a recurrence, related to any previous treatment (i.e. radiation induced), or something entirely new.

The mass was biopsied. H&E sections revealed the mass as shown. Many stains were performed and the lesion was positive for Vimentin, variably positive for S-100 and negative for HMB-45, MART-1, PAX-8, neurofilament, chromogranin, synaptophysin, and GFAP. Other stains were performed and will be reported at the DSS. She underwent a partial resection (tumor near the carotid could not be resected and tumor was adherent to some of the bones in the sinuses) where the majority of tumor was resected. The immunophenotype of the resected material was identical to that seen in the biopsy. The patient is receiving radiation therapy and follow up imaging. Slides from the 1997 lesion reported to be a pituitary adenoma were also obtained and will be discussed at the DSS.

Material submitted:

H&E stained slide of resected lesion

Points for discussion:

1. Diagnosis
2. Obtaining previous material, when possible
3. Appropriate workup of pituitary adenomas