



Case Report

SINONASAL PAPILLARY ADENOCARCINOMA

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Abstract

Adenocarcinomas of the paranasal sinus are uncommon, accounting for less than 1% of all malignancies and about 5% to 20% of all carcinomas in the sinonasal area and most often found in the ethmoid sinus. We report a case of 66 years old Malay gentleman with a recurrence of sinonasal papillary adenocarcinoma after a history of left radical maxillectomy, ethmoidectomy and sphenoidectomy in July 2004.

Keywords : Sinonasal CA, Papillary Adenocarcinoma, paranasal sinus, epistaxis

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CASE REPORT

A 66 years old Malay gentleman with a history of papillary adenocarcinoma of left ethmoid and maxilla underwent left radical maxillectomy and ethmoidectomy and sphenoidectomy in July 2004. The final histopathology was consistent with sinonasal papillary adenocarcinoma, and the surgical margin

reported to be clear of tumor cells. The patient later completed 26 cycles of radiotherapy. He came for ENT surveillance follow up only until 2006, where he defaulted his follow up. In February 2018, the patient presented to the ophthalmology team with complain of left eye pain and swelling including a left cheek area with episodes of epistaxis and rhinorrhea. The patient also claimed that he had loss weight (~ 10kg in 4 months) and appetite. Examination by the ophthalmology team, noted left eye proptosis with lagophthalmos and cicatricial ectopian with symblepharon. The patient was then referred to ORL team to rule out the possibility of recurrence papillary adenocarcinoma. On nasal endoscope examination, a mass was seen occupying and obliterating the left middle meatus and it extended posteriorly to the nasopharynx. Through the previous posterior septectomy defect, the mass crosses to the right nasal

cavity. The mass appears to be vascularized but no contact bleeding encountered. A computerized tomography (CT) showed a solid lesion occupying the frontal, ethmoid and sphenoid sinuses with evidence of extension to the base of skull superiorly, laterally the lesion causes displacement of the bilateral medial rectus muscles and optic nerves with evidence of lung metastases.

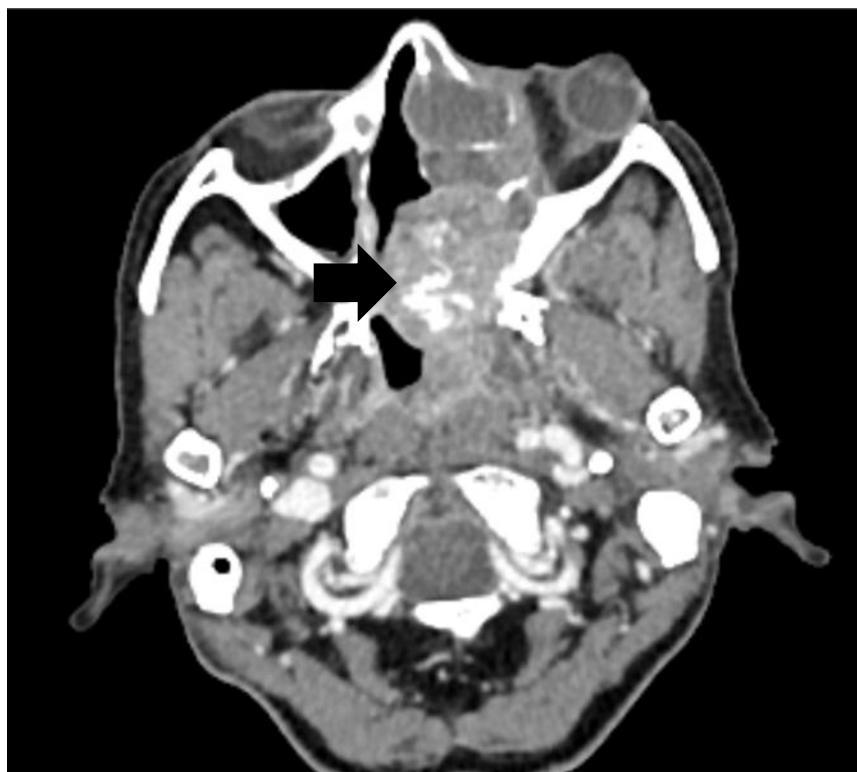


Figure 1: Irregular heterogeneously enhancing solid lesion measure approximately 6.5cm x 4.7cm x 8.3 cm occupying frontal, ethmoid and sphenoid sinuses causing extensive bone erosion and with coarse calcification within the lesion.

The management for sinonasal papillary adenocarcinoma is preferably a complete surgical resection of the disease to achieve local control followed by postoperative radiotherapy. Radiotherapy alone has had a limited role in achieving primary cure of adenocarcinoma furthermore the danger of ocular injury. Surgical removal is traditionally performed using open approaches such as midfacial degloving, rhinotomy or craniofacial resection. In recent years, endoscopic endonasal resection has been proven to be a safe and feasible method by which to radically resect selected sinonasal malignancies while obtaining valid oncologic outcomes and dramatically reducing the rates of surgical complications and morbidity⁴. Local recurrence is the most frequent cause of treatment failure in sinonasal adenocarcinoma, even in its early stages, with a mean interval of 26.5 months. Despite their usually low-grade histopathology appearance, papillary adenocarcinomas can recur and their recurrences behave aggressively. Heffner et al noted a 30% recurrence rate⁵.

Discussion

Adenocarcinomas of the paranasal sinus are rare, accounting for less than 1% of all malignancies and about 5% to 20% of all carcinomas in the sinonasal area² and it is most often found in ethmoid sinus. Adenocarcinomas are composed of cylindrical epithelium which either grows in imitations of glands or builds pseudopapillary formations. Adenocarcinomas may arise from the glands of the mucous membrane, but certain pseudopapillary tumors may also originate in the cylindrical epithelium on the surface and in glandular excretory ducts of the mucous membrane⁷. Sisson et al described 60 patients with paranasal sinus malignancy: 15 (24%) had primary tumors of the ethmoid sinus. Five of the 60 patients (8%) had primary adenocarcinomas. [6] The specific pathology of ethmoid carcinomas was not described. Lampe et al described 16 patients with primary ethmoid malignancy treated over a 10-year period at the University of Michigan. These tumors comprised 15% of all malignancies of the paranasal sinuses.⁹ Studies by Acheson and Hadfield have confirmed an increased incidence of adenocarcinoma of the ethmoid sinuses in furniture makers and wood machinists⁹.

The 5-year survival for adenocarcinomas of the ethmoids is usually reported to be between 30% and 50%. Important factors influencing this figure are the extent of the disease at the time of diagnosis and also the histologic type of adenocarcinoma¹⁰. Notably, local recurrences are often amenable to further endoscopic or combined resections, with favorable results. For this reason it's strongly recommended for a strict post-operative endoscopic and radiologic surveillance for early detection of relapse¹¹.

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