ADENOID CYSTIC CARCINOMA OF THE HARD PALATE

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ABSTRACT

BACKGROUND
Adenoid cystic carcinoma (ACC) is a rare malignant tumour that affects the major and minor salivary glands. 30-40% of these carcinomas occur as head & neck tumours. It is well known for its prolonged clinical course and the tendency for delayed onset of distant metastasis.

KEYWORDS
Adenoid Cystic Carcinoma, Malignant Hard Palate, MWO Salivary Gland Tumours.


CASE REPORT
A 52-year-old male patient reported to the department of otolaryngology with complaints of ulcerative lesion over the hard palate which was progressive in nature since 2 years and swelling over right side of neck since 1 year which was slowly progressive. Personal history was negative for alcohol or tobacco consumption.

Examination revealed an ulcerative lesion measuring 2 x 2.5 cm noted in the posterior aspect of hard palate towards right side of the midline, covered with slough and surrounding area of induration with underlying bony defect. Figure 1.

Right cervical level 2 lymphadenopathy measuring 2 x 2 cm hard, nontender and mobile was present.

FNAC of the lymph node revealed features suggestive of pleomorphic adenoma.

Biopsy from the lesion also revealed features suggestive of pleomorphic adenoma.

IMAGING: CECT neck revealed enlarged level 2 cervical lymph node on right side.

Wide excision was done with 1 cm margin. Histopathology was reported as adenoid cystic carcinoma. Figure 2.

Patient underwent radiotherapy and is on regular followup since then with no evidence of recurrence. Figure 3.

DISCUSSION
Adenoid Cystic Carcinoma (ACC) is a rare malignant tumour that affects both major and minor salivary glands. It is the commonest malignant tumour of minor salivary glands. Rarely, it may also present as a primary intraosseous tumour of the mandible and maxilla. The tumour affects men and women equally in the fifth decade of life as seen in this case.

Studies have found that smoking, alcohol consumption did not increase the risk of salivary gland cancer with possible increase in patients who received radiation treatment to the head and neck, ultraviolet light treatment or full mouth dental x-rays. The present case also does not give any history of alcohol and tobacco consumption.

The most frequent clinical presentation of minor salivary gland tumour was in the form of a soft or slightly indurated lesion located in the hard or soft palate. But in the present case it was presented as ulcerative lesion.

The diagnosis of minor salivary gland tumours is based on a combination of clinical history and physical exploration, Magnetic Resonance Imaging, Computed Tomography alone or combined with sialography and Fine Needle Aspiration Biopsy. CT scans are important to delineate the tumour, to plan extent of surgery and to look out for recurrences as a followup postoperatively.

If nodes are present, they require an FNA.

After imaging, a biopsy needs to be performed. Three histological patterns of growth have been described. The typical Adenoid cystic carcinoma has a cribriform pattern nests, and columns of cells of rather bland appearance are arranged concentrically around gland-like spaces which are filled with hyaline PAS positive material. Some have a predominantly tubular pattern while a few others have a solid pattern. If nodes are present, they require an FNA.

Treatment of ACC includes complete excision of the local disease followed by post-operative radiotherapy. This was followed in the present case. Neutron radiotherapy has been studied in this disease with some authors suggesting a role for it.

Small lesions may be excised transorally. Large tumours requiring partial maxillectomy can be approached through lateral rhinotomy incision or midface deglouving. If cancer extends through the palate, then it requires total maxillectomy. Radiation is effective for both squamous cell tumours and salivary gland tumours, and while surgery has a role in managing of hard palate tumours, so does radiation therapy.
Patients who receive only radiation are either poor surgical candidates with unresectable disease or have neoplasms so small they can be treated without surgery. Compared to mandible, the residual maxilla does not move, making a prosthesis a good option for functional recovery. Because of this, the Obturator was the "gold standard" for years. However, advancements in reconstructive surgery have led to multiple publications in recent years advocating tissue reconstruction. In patients with severe trismus, a free flap is better. Soft tissue defects of the hard palate are essentially a non-issue, as the hard palate can be left to granulate with relatively little patient morbidity.\textsuperscript{[5]}

Chemotherapy using one or a combination of drugs (cyclophosphamide, 5-fluorouracil, mitomycin-C and cisplatin) has been used with some success and remission.\textsuperscript{[8]}

\textbf{REFERENCES}