

Nasal Pyramid Skin's Adenosquamous Carcinoma : A Rare Case Report

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Abstract:-

Introduction: Adenosquamous carcinoma (ASC) is a rare type of squamous cell carcinoma (SCC). It is known to be more aggressive. It is not commonly described in the literature with very little cases reporting tumor's diagnosis features and outcomes. We report an unusual location of the tumor in the nasal pyramid skin.

Case presentation: A 57- year-old man presented a chronic enormous painless mass of the nasal pyramid evolving for 4 months, associated with unilateral left nose bleeding and nasal obstruction. The clinical examination finds an ulcerative bulging mass of the left part of the nasal pyramid reaching out the other side. The biopsy specimen of the mass showed mucoepidermoid carcinoma. The patient underwent surgical excision of the tumor. Microscopically, the histopathological examination of the operative specimen had combined features of squamous carcinoma and adenocarcinoma components. Perineural and vascular invasion were present. The patient subsequently underwent adjuvant treatment radiotherapy and chemotherapy with no evidence of local recurrence or regional metastasis.

Conclusion: Adenosquamous carcinoma is uncommon and aggressive tumor. All clinicians should keep in mind when treating patients with ASC of head and neck, that they have to consider the tumor as being on the most aggressive form compared to conventional SCC with higher tendency of disease recurrences, distant and lymph node metastases.

Keywords:- Adenosquamous carcinoma, head and neck, mucoepidermoid carcinoma, nasal carcinoma. Adenosquamous carcinoma (ASC), squamous cell carcinoma (SCC), mucoepidermoid carcinoma (MEC).

I. INTRODUCTION

Head and neck adenosquamous carcinoma (ASC) is an unusual tumor without general consensus of diagnostic criteria. It is known to be more aggressive. It is not commonly described in the literature with very little cases reporting tumor's diagnosis features and outcomes. It was first reported in 1968 by Gerughty et al. where it was shown to be extremely aggressive, with more than 70 % of patients with distant metastases [1]. For several decades, it was known to be the same variant as salivary mucoepidermoid carcinoma (MEC). However, in 1984, Evans suggested that ASC should be considered as a different tumor with a worse

prognosis compared to MEC [1,2]. We report an unusual location of ASC in the nasal pyramid skin.

II. CASE PRESENTATION

A 57- year-old man, diabetic type 2, teacher, presented a chronic enormous painless mass of the nasal pyramid evolving for 4 months, associated with unilateral left nose bleeding and nasal obstruction. The clinical examination finds an ulcerative bulging mass of the left part of the nasal pyramid reaching out the other side (Fig.1a). Rhinoscopy examination finds signs of allergic rhinitis with tumor invasion of the left nasal cavity. The parotid and cervical lymph node areas were free. We performed a facial CT scan showing a mass of the nasal pyramid measuring 38.9mm*33.4mm, partially filling the whole left nasal cavity (Fig.2 (a,b)). A biopsy specimen of the mass was consistent with MEC. The patient underwent surgical excision and the tumor was removed in a single and wide block. Almost the entire nasal pyramid was removed including the underlying septum cartilage, leaving a small part of the sides of the nostrils in place (Fig.1b). Microscopically, the histopathological examination of the operative specimen had combined features of distinct areas of SCC and adenocarcinoma elements confirming the presence of ASC. We have also found the presence of perineural and vascular invasion. Afterwards, the patient underwent adjuvant chemoradiation therapy. After 12 months of follow-up, there were no evidence of local relapses or distant lesions.

III. DISCUSSION

Head and neck ASC has been reported as an uncommon group and a distinct head and neck tumor type for so many years. Similar to other variants of head and neck SCC, the literature shows that ASC more commonly occur in men with a mean age of 60 years [1, 5, 6]. Laryngeal lesion was considered as the most common location, followed by oral cavity and oropharynx, the pharynx and the nasal cavities are less frequently affected. ASC has been described by the World Health Organization as a malignant tumor known by the simultaneous presence of both adenocarcinoma and squamous cell carcinoma [7]. Although confluence areas may be present in ASC [1, 8], distinct areas of each component are always found and it is very useful in differentiating this tumor from MEC. However, in MEC, the two components (squamous and glandular) are generally intimately intertwined and distinct areas are not found [8, 9]. Furthermore, intermediate or transitional cells are absent in ASC but may be seen in MEC [8, 9]. The distinction between ASC and MEC is so

important because of the considerable different prognosis of each of these tumours [10]. In addition to the distinct areas of squamous components with extracellular keratin formation, more nuclear atypia and mitotic activity than even high-grade MEC can be found in ASC. Further evidence to support a diagnosis of ASC may be obtained using immune histo chemistry that demonstrates distinctive staining patterns in each of the 2 components, with positive immune reactivity with CK7 and CAM5.2 in the adenocarcinoma component, and positive immune reactivity with pancytokeratin or p63 but negative immune reactivity with CK7 and CAM5.2 in the SCC component [11, 12]. Still, the pathologist may find some difficulties in the histological diagnosis of ASC. On the biopsy, the tumor might easily be confused with salivary gland MEC. Evidence of a dual squamous and glandular differentiation may only be present after assessment of the complete tumor on the resection specimen. Rarely, only the metastatic foci may reveal the dual differentiation of ASC [13]. Yoshimura et al. reported a rate of incorrect histology (68.5%) based on the biopsy [14]. The aggressiveness and treatment resistance of ASC of the head and neck have been reported in the literature. However, because of the rarity of the tumor, neither preoperative

diagnostic procedure nor management strategies have yet been standardized. Surgery seems to be the treatment of choice, with likely added therapeutic advantage with adjuvant chemoradiation therapy when it would be otherwise indicated [10]. Furthermore, previous studies have suggested that predilection for perineural invasion may be a factor, which has been noted in 50 % of the cases in a series described by Keelawat [10] and in 40 % of the patients reported by Schick et al. [15]. More studies should be conducted in this way to assess further features for better diagnosis and management of this entity of tumors.

IV. CONCLUSION

Adeno squamous carcinoma is uncommon and aggressive tumor. All clinicians should keep in mind when treating patients with ASC of head and neck, that they have to consider the tumor as being on the most aggressive form compared to conventional SCC with higher tendency of disease recurrences, distant and lymph node metastases. Further studies should be conducted in this way to assess more diagnosis criteria for better management of this rare entity of tumor.

- *Conflict of interest: None*

V. FIGURES



Fig.1 :ulcerative bulging mass of the left side of the nasal pyramid extending to the other side occupying the whole nasal pyramid
a/Before surgery
b/ After surgery

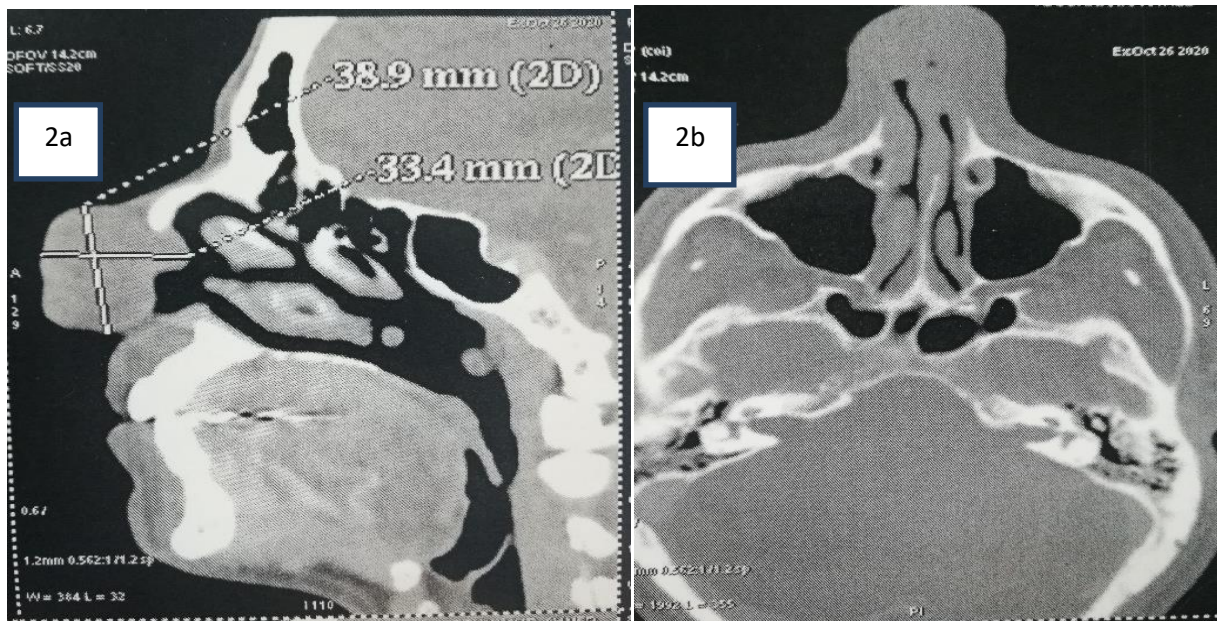


Fig.2: Facial CT scan showing a mass of the nasal pyramid measuring 38.9mm*33.4mm, partially filling the whole left nasal cavity.

a/ Sagittal section
b/ Axial section

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