

Case Report

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Pleomorphic Adenoma Presented as Hard Palatal Mass: A Case Report



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Abstract

Objective: To consider one of the differential diagnoses of palatal mass as pleomorphic adenoma

Case presentation: 21-year-old female patient presented in ENT department with painless mass in right side of hard palate for 2 years which was gradually progressive and slight discomfort on tongue movement and chewing food which on examination found to be 2*2cm swelling in right hard palate with normal overlying mucosa. On radiological examination, there was heterogenous swelling with intact hard palate. With provisional diagnosis of pleomorphic adenoma, excision of mass with overlying mucosa and periosteum was done. Histopathological report confirmed the diagnosis.

Keywords: Palatal mass; Pleomorphic adenoma; Excision

Introduction

Pleomorphic adenoma is the most common salivary gland tumours accounting for 40-70% of all major and minor salivary gland tumours [1]. It is also commonest minor salivary gland benign tumours accounting 70% of all tumours [2]. Hard palate is the commonest site followed by upper lip, buccal mucosa, tongue, floor of mouth, retromolar trigone [3,4]. Common age of presentation is second decade of life [5] with slight female preference [3]. Presenting symptoms are painless slow growing mass without ulceration and surrounding inflammation which on palpation feels non-tender, firm, rubbery [6]. In this paper, we present a case of pleomorphic adenoma of minor salivary gland in hard palate who treated with wide local excision.

Case Report



Figure 1: Palatal mass in the right side.

21 year old female patient presented in ENT department with painless mass in right side of hard palate for 2 years which was gradually progressive and slight discomfort on

tongue movement and chewing food but there was no history of ulceration, bleeding, difficulty in swallowing, breathing and swelling in neck. On examination there was single swelling in the posterior part of the right hard palate measuring 2*2cm with normal overlying mucosa which on palpation firm, non-tender and well defined swelling (Figure 1). On radiological investigation, there was solitary heterogenous swelling in the right hard palate without calcification and bony erosion. There was scalloping of bone of hard palate due to pressure effect (Figure 2). With all this finding provisional diagnosis of pleomorphic adenoma of hard palate was made and planned for surgical excision. Surgical excision of the mass was done in total along with the overlying mucosa and taking margin from surrounding mucosa. The wound was left open to let itself heal by granulation. The per-operative findings were 2*1.5cm single well encapsulated swelling in the hard palate extending to its posterior border and on cut section it was found to be yellowish white in colour (Figure 3).

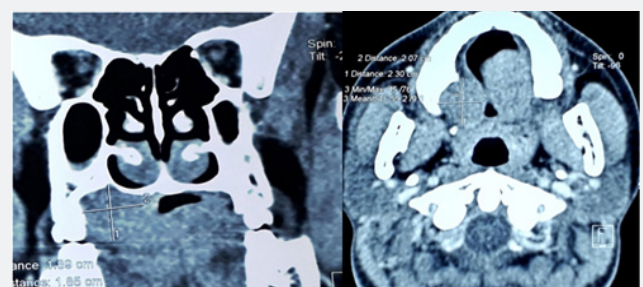


Figure 2: Computed tomography scans of palatal mass coronal cut and axial cut showing intact hard palate.

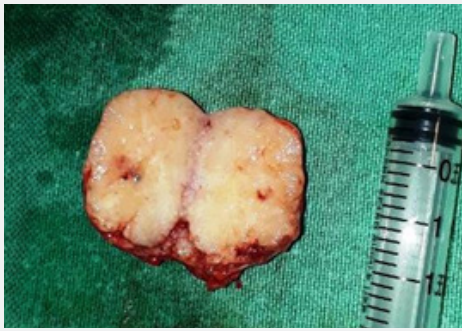


Figure 3: Cut section of excised palatal mass.

Discussion

Pleomorphic adenoma has different embryological origin. It arises from both epithelial and mesenchymal origin. They arise from intercalated and myoepithelial cells. The mass is well demarcated from surroundings by fibrous capsule [6]. Formation of the capsule is a result of fibrosis of the surrounding salivary parenchyma which is composed of the tumor and is referred to as false capsule [7]. The pleomorphic adenoma is typically a well circumscribed, encapsulated tumor. The capsule may be incomplete which is more common in minor salivary gland tumours [8]. Most of the pleomorphic adenoma occurs in major salivary glands and parotid is the commonest. It is also the commonest tumour of minor salivary glands [9]. Palate has the highest number of minor salivary glands in upper aerodigestive tract [10]. So, palate is the commonest site of minor salivary gland tumours. It is followed by lips, buccal mucosa, tongue, retromolar area, pharynx, tonsils. In palate, most common location is posterolateral aspect [11].

The tumour is cellular with background stroma which can be mucoid, myxoid, cartilaginous or hyaline [12]. In “cellular” type of pleomorphic adenoma the epithelial element is dominant and “myxoid” type possess myxomatous element. Typical pleomorphic adenoma is of mixed type. Different epithelial cell types are spindle, clear, squamous, basaloid, cuboidal, plasmacytoid, oncocytic, mucous and sebaceous [13]. It can occur in any age group, but common presentation is in age group of 30-60 years with slight female predominance. Usual presentation of palatal pleomorphic adenoma is painless, slow growing smooth dome shaped [11], rubbery, submucosal mass without mucosal ulceration [14]. If ulceration present, it may be due to trauma or biopsy or malignancy. Due to expansion of mass against bone, there can be cupped out bone resorption [15,16].

Diagnosis of pleomorphic adenoma is based on history, clinical examination and histopathology. Computed tomography scan is an adjuvant diagnostic aid helpful in revealing about the size and extension of the tumour to the adjacent structures and to rule out bony involvement. Confirmatory diagnosis will depend on histopathological examination. Treatment of palatal pleomorphic adenoma involves wide local excision of the tumor together with clear margins involving the periosteum

and associated mucosa, followed by curettage or excision of the underlying bone if involved to avoid recurrence. Palatal periosteum is an effective barrier to spread [16]. As simple excision of this tumour has high rate of recurrence, it is best avoided [6]. If palate needs to be excised, it needs to be closed with island flaps. Prognosis of palatal pleomorphic adenoma is usually good with cure rate of 95%, does not recur after adequate surgical removal. The risk of recurrence is low for tumours of minor glands [17]. Tumors with a predominantly myxoid appearance are more susceptible to recur than those with other features. Other causes of recurrence are pseudopodia, capsular penetration, and tumour rupture [18]. The risk of malignant degeneration into carcinoma ex pleomorphic adenoma is rare, occurring only in 5% of all cases [19].

Conclusion

Pleomorphic adenoma is one of differential diagnoses of palatal mass. Excision of mass with adequate margin is the treatment of choice.

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