



ISSN: 0975-833X

## CASE REPORT

### A RARE CASE: PLEOMORPHIC ADENOMA PERFORAT CHEEK MUCOSA

**\*Dr. Thaer Hameed Mohsin**

Head of Oral and Maxillofacial Department Collage of Dentistry, Wasit University, Iraq

#### ARTICLE INFO

##### Article History:

Received 10<sup>th</sup> December, 2013  
Received in revised form  
24<sup>th</sup> January, 2014  
Accepted 19<sup>th</sup> February, 2014  
Published online 25<sup>th</sup> March, 2014

##### Key words:

Mouth,  
Tongue,  
Tonsil,  
Pharynx,  
Recurrences

#### ABSTRACT

Pleomorphic adenoma, also called benign mixed tumor, is the most common tumor of the salivary glands. About 90% of these tumors occur in the parotid gland and 10% of them occur in the minor salivary glands. The most common sites for pleomorphic adenoma of the minor salivary glands are the palate, followed by the lips and the cheeks without any ulceration or perforation of the mucosa. Other rare sites include the floor of the mouth, tongue, tonsil, pharynx, the retromolar area and the nasal cavity. Here, we are reporting a case of pleomorphic adenoma of the minor salivary glands of the cheek in a 36-year old woman perforate the cheek mucosa. The mass was removed by wide local excision. There were no recurrences after a follow-up period.

Copyright © 2014 Dr. THAER HAMEED MOHSIN. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### INTRODUCTION

Pleomorphic adenomas are benign salivary gland tumours that represent about 3-10% of the neoplasm's of the head and neck region (Gracia, 2002). The palate is considered as the most common intraoral site (42.8-68.8%), followed by the upper lip (10.1%) and cheek (5.5%) (Kaminshi and Janicki, 2002). Other rare sites include the throat (2.5%), retromolar region (0.7%), floor of the mouth and the alveolar mucosa (Wang *et al.*, 2007). Pleomorphic adenoma usually presents as a mobile, slowly growing, painless, firm swelling that does not cause ulceration of the overlying mucosa (Kaminshi and Janicki, 2002). Pleomorphic adenoma consists of cells with epithelial and mesenchymal differentiation (mixed tumor). The highly variable morphology of this neoplasm is the result of interplay between these elements. Now it is widely accepted that both epithelial and mesenchymal (myxoid, hyaline, chondroid, osseous) elements often arise from same cell clone, which may be a myoepithelial or ductal reserve cells. There is no difference in behavior of this neoplasm based on proportion of various elements (Lee *et al.*, 2003). The mucosa of the cheek is a uncommon site of occurrence for intraoral pleomorphic adenoma (Bablani *et al.*, 2009). Here we report a case of pleomorphic adenoma in 36 years old girl perforate the mucosa. The relevant studies were discussed.

#### Case report

A 36-year old ,diabetic woman, come to oral and maxillofacial department in Al-Zhra teaching hospital, wasit, Iraq, suffering from extra oral a symmetry and intra oral growth in the right

cheek area. clinical examination: reveled extra oral which is present with a slowly growing painless rubbery mass about 4cm,4 years duration, in the right cheek (Figure 1).

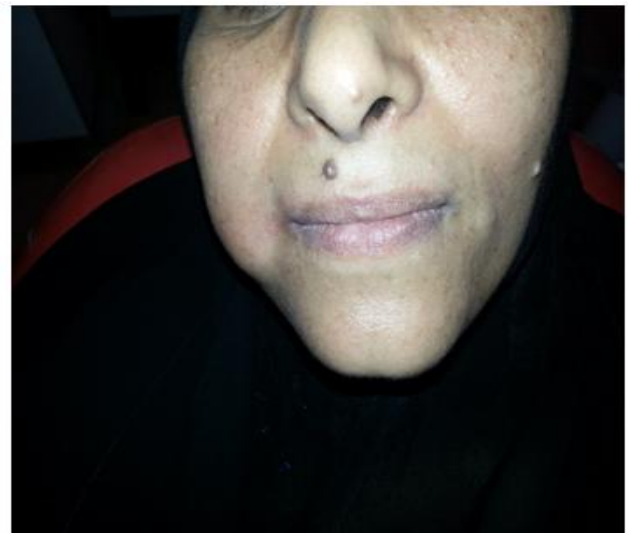


Figure 1.

The skin over the region was not fixed to underlying structure and was freely movable in all planes. Intra oral examination presented with intra oral exfoliated rubbery mass, lobulated, painless, pink in color 3cmx2cm through perforation the cheek mucosa (Figure-2), no history of trauma, fever, disturbance of salivation, or oral surgeries also no lymph node enlargement. The Radiological examination (MRI) reveal 3cm x3cm mass in the right cheek with extension 3cm x2cm intra orally, no abnormality in the panoramic radiograph. The mass was

\*Corresponding author: Dr. Thaer H. Mohsin, Head of the Oral and Maxillofacial Department Collage of Dentistry, Wasit University, Iraq

dissected and total mass excised under general anesthesia through intra oral approach and the wound closed in layers, it did not involve the facial muscles or subcutaneous tissue of the cheek. The lesion was in form of a lobulated well demarcated, partially encapsulated, gray-pink partly myxoid, partly rubbery mass, measuring 4× 3× 2 cm (Figure-3). On histology, fine needle aspiration cytology revealed features of pleomorphic adenoma which were confirmed on histopathological examination, it appears that neoplastic proliferation has biphasic populations of epithelial and mesenchymal cells. The former was composed of glandular structures lined by round, oval cells which have large hyperchromatic nuclei, pink cytoplasm and myoepithelial basal cell layer. The stroma was myxoid, hyalinand chondroid.



Figure 2.



Figure 3.

## DISCUSSION

Pleomorphic adenoma is the commonest benign tumour 40% originating from the mature salivary tissue, occurs more frequently in women than in men and is most common from the fourth to sixth decades with a mean age of 43-46 years (Jorge *et al.*, 2002). Salivary gland pleomorphic adenoma mainly occur in the major salivary gland and if affect the minor salivary gland it occur mostly in the palate and rarely in the lip and cheek, its not ulcer or perforate the mucosa (Bablani *et al.*, 2009) Most of the salivary gland tumors although may have a great potential to change into malignancy (Byakodi and Thimath, 2011). The incidence of malignant transformation of a preexisting pleomorphic adenoma increase progressively with the preoperative duration of the tumor. In the series studied by Eneroth and Zetterberg, the rate of

malignant transformation was 1.6% in tumors present for less than five years and 9.4% in tumors present for greater than 15 years (Bagewadi and Bhoweer, 2002). A very rare variant, called metastasizing. Pleomorphic adenoma, is histologically benign, but inexplicably present with distant metastasis (Bagewadi and Bhoweer, 2002), here we report rare case 27 years old woman with pleomorphic adenoma perforate the mucosal cheek and exfoliate intra orally. The differential diagnosis of pleomorphic adenoma of the cheek includes buccal space abscess, dermoid cyst, foreign body reaction, fibroma, lipoma, neurofibroma, rhabdomyosarcoma, mucoepidermoid carcinoma, adenoid cystic carcinoma, polymorphous low-grade adenocarcinoma and carcinoma ex pleomorphic adenoma (Jorge *et al.*, 2002).

The possibility of buccal space abscess was ruled out due to absence of sign of inflammation and presence of growth projected intra orally. The solid nature of the lesion coupled with the lack of tissue representing the three germ layers rule out the possibility of dermoid cyst. The lack of pain, parasthesia or invasion of the surrounding tissue rules out the possibility of malignant transformation. Carcinoma ex pleomorphic adenoma is characterized by the presence of malignant epithelium (salivary duct carcinoma, undifferentiated carcinoma, adenocarcinoma not otherwise specified, terminal duct carcinoma or myoepithelial carcinoma) with benign stroma. Carcinoma ex pleomorphic adenoma is extensively infiltrative malignancy with necrosis, perineurial invasion, frequent mitotic figures, marked nuclear atypia. The elective treatment of a pleomorphic adenoma is surgery. There are numerous surgical approaches indicating the difficulty of access, accentuated by the Communications with the neighboring regions. Inadequate resection or rupture of the capsule or tumors spillage during excision can lead to local recurrence as these tumors often have microscopic interruptions in the capsule (Jorge *et al.*, 2002). The prognosis of a pleomorphic adenoma is good. The patient is remaining disease free after surgical excision and is on a regular follow-up

## Conclusion

To conclude, pleomorphic adenoma of the cheek is a rare neoplasm normally Its not perforate or ulcerate overlying mucosa or skin and therefore its diagnosis requires a high index of suspicion. Complete wide surgical excision is the treatment of choice. Recurrence after many years of surgical excision as well as malignant transformation should be a concern and therefore long- term follow- up is necessary.

## REFERENCES

- Gracia JR, Ramirez Z, Canacho R, Trini A, Salas C. 2002. Mixed tumour (pleomorphic adenoma) of the head and neck typical and atypical pattern in otorrinolaringio, 27:333-40
- Wang Dli Y, He H, Wu, Hez 2007. Intra oral minor salivary gland tumours in a chine population; retrospective study on 737 case. *oral surg oral med oral path oral radi Endod*, 104:94-100
- Kaminshi M, Janicki 2002. A case of giant pleomorphic adenoma of the cheek with two malignant centers. *otolaryngol pol*, 56:385-87

- Lee Ps, Sabbath-Solitare M, Redondo Tc, Oncapin EH 2003. Molecular evidence that the stroma and epithelial cells in pleomorphic adenomas of salivary gland arise from the same origin clonal analysis, 31:498-503
- Bablani D, Bausal S, Shetty SJ, Desel R, Kulkarni SR, 2009. Pleomorphic adenoma of the cheek a case report and review *J oral maxillofac surgery*, 67:1539-42
- Jorge, Pires, Alves FA 2002. Juvenile intra oral pleomorphic adenoma report of five cases and review of literature, *int of oral maxillofac surg*, 31:273-75
- Byakodi S, Ch Thimath S 2011. Pleomorphic adenoma of the palate. A case report. *int j Dent case report*, 1(1):36-40
- Bagewadi A, Bhoweer A 2002. Carcinoma in gigantic adenoma of palat, A case report, A case report *JIAMOR*, 13(1):30-33
- Klijanienko J, Vielh P, Batsakis JG 2000. Adenoma in salivary gland tumours, *S. Karger AG*:22-23

\*\*\*\*\*