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Surgery

A RARE CASE REPORT ON PLEOMORPHIC ADENOMA OF CHEEK

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ABSTRACT Pleomorphic adenoma also called as mixed salivary tumour, is the commonest of the salivary gland tumour in adult. About 90% of these tumors occur in the parotid gland and 10% in the minor salivary glands. The most common sites of pleomorphic adenoma of the minor salivary glands are the palates followed by lips and cheeks. Other rare sites include the throat, floor of the mouth, tongue, tonsil, pharynx, retromolar area and nasal cavity. Pleomorphic adenoma is of mesenchymal, myoepithelial and duct reserve cell origin. Here we report a case of pleomorphic adenoma of cheek in a 12 years old young female patient.

KEYWORDS : juvenile pleomoprphic adenoma, cheek, mixed salivary tumour

Introduction:

Pleomorphic adenoma defined as a circumscribed tumor characterized by its pleomorphic or mixed appearance clearly recognizable epithelial tissue being intermingled with tissue of mucoid, myxoid and chondroid appearance. Among all salivary gland tumors, pleomorphic adenoma is the most frequently encountered lesion accounting for 80% of all salivary glands tumour. It occurs in any age group but common in 4th and 5th decades of life. Its preponderance is more in females than males(2:1). It account for 53-77% of parotid tumors, 44-68% of submandibular tumors, 6.4% occur in minor salivary glands. Among minor salivary glands, palate is considered as the most common intraoral site, followed by upper lip and cheek. Pleomorphic Adenoma is of glandular origin, usually presenting as a slowly growing, painless, firm swelling that does not cause ulceration of the overlying mucosa. The mucosa of the cheek is an uncommon site of occurrence for intraoral pleomorphic adenoma. Here we report a case of pleomorphic adenoma in a 12 year old. The relevant studies have been discussed.

Case report:

A 12 year old girl presented with complaints of swelling of right cheek for last 2 years which was gradual in onset, slowly growing and painless in nature in the posterior part of the buccal mucosa opposite the 2nd left maxillary molar tooth. There was no history of trauma, fever, bleeding, pain, sensory changes and disturbance of salivation. There is no facial asymmetry. Clinical examination reveals swelling of size 2.5 X 2 cms of oval in shape, firm in consistency, non-tender, non-fluctuant and non-reducible, non-pulsatile and freely movable. Overlying mucosa was of normal in color. The skin over the swelling appeared normal and was pinchable with no localized increase in temperature.

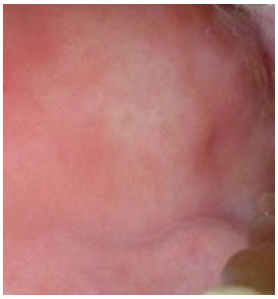

Figure 1: clinical picture of pleomorphic adenoma

Radiological examination showed no abnormality in the panoramic radiograph. The ultrasound examination revealed oval hypoechoic well-marginated mass without any calcification and increased vascularity.

The tumour is excised with margins of normal surrounding tissue under general anaesthesia.

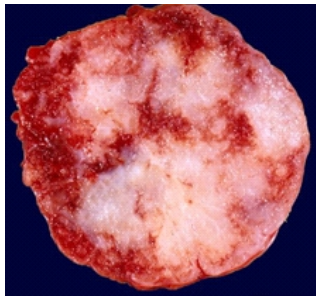

Figure2: Gross appearance

Grossly, the lesion was ovoid in shape, well demarcated partially encapsulated, grey-white rubbery mass with solid cut surface.

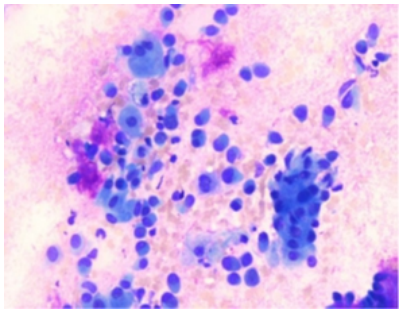

Figure 3: shows typical cytological findings of epithelial and myoepithelial cells with myxoid matrix(pink) in the background

On histopathological examination, specimen showed biphasic population of epithelial and myoepithelial cells. The former was composed of glandular structures lined by oval round cells having hyperchromatic nuclei, pink cytoplasm with no mitotic figures or necrosis suggestive of benign pleomorphic adenoma of minor salivary glands of cheek.

Discussion:

Tumors originating in the minor salivary glands are uncommon neoplasms. Pleomorphic Adenomas are benign heterogeneous tumors of salivary gland origin, which are made up of myoepithelial and epithelial components. This tumor of salivary glands is also known as benign mixed tumor. Pleomorphic Adenoma occurs commonly between the 4th and 5th decades with female predilection. The Pleomorphic Adenoma of minor salivary glands clinically present as painless, slow growing sub mucosal masses. The covering mucosa is seldom affected unless it is secondarily traumatized. The majority of intraoral mixed tumors are less than 3.0 cm in diameter. They are

usually solitary and well-circumscribed. The differential diagnosis of minor salivary gland pleomorphic adenoma of the cheek includes buccal space abscess, hemangioma, dermoid cyst, lipoma, neurofibroma, rhabdomyosarcoma, mucoepidermoid carcinoma, adenoid cystic carcinoma, carcinoma ex pleomorphic adenoma, and foreign body reaction. Abscess was ruled out because of the absence of signs of infection, hemangioma was ruled out by the absence of any bleed even after ulceration. Dermoid cyst or lipoma was ruled out as there was no fluctuance. Malignancy was ruled out as there was no induration or fixity to underlying tissues. There are three histological subtypes, myxoid (80% stroma), cellular (myoepithelial cells predominating) and mixed (classic). In our case, the lack of inflammatory signs, ulceration, pain and invasion ruled out infection and malignancy. The surgical treatment of Pleomorphic Adenoma is complete wide excision with good safety margins to prevent recurrence. Pleomorphic Adenoma is known to produce recurrence either due to spillage, inadequate removal or enucleation at the time of operation, but is not known to produce distant metastasis. A recurrence rate of 2-44% has been reported in the literature. The ideal treatment of choice for PA is wide local excision with good safety margins and follows-up for long time.

Conclusion:

To conclude, pleomorphic adenoma of the cheek is a rare neoplasm 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:

1. Rao PK, Shetty SR, Hegde D. Ectopic pleomorphic adenoma. N Am J Med Sci 2012;4:190-2.
2. Aggarwal A, Singh R, Sheikh S, Pallagatti S, Singla I. Pleomorphic adenoma of minor salivary gland: A case report. RSBO 2012; 9:97-101.
3. Kondo T. A case of lipomatous pleomorphic adenoma in the parotid gland. Diagn Pathol. 2009;4:16. doi: 10.1186/1746-1596-4-16
4. Bablani D, Bansal S, Shetty SJ, Desai R, Kulkarni SR, Prasad P, Karjodkar FR. Pleomorphic adenoma of the cheek: a case report and review.
5. Ide F, Kusama K. Myxolipomatous pleomorphic adenoma: an unusual oral presentation. J Oral Pathol Med. 2004;33:53–5.
6. Theony HC. Imaging of salivary gland tumours. Cancer imaging. 2007:7:52-62
8. Jorge J, Pires FR, Alves FA, Perez DE, Kowalski LP, Lopes MA, et al. Juvenile intraoral pleomorphic adenoma: Report of five cases and review of the literature. Int J Oral Maxillofac Surg 2002;31:273-5
9. Harada H. Histomorphological investigation regarding to malignant transformation of pleomorphic adenoma (so-called malignant mixed tumor) of the salivary gland origin: special reference to carcinosarcoma. Kurume Med J. 2000;47:307–23.
11. Vyas KC, Mathur SP. Pleomorphic salivary adenoma of cheek. A case report J Laryngol Otol. 1984;98:421–3.
12. Pillai AK, Satpathy M, Nahar S, Moghe S. Pleomorphic adenoma in cheek: An uncommon finding. IJSS Case Rep Rev 2014;1:19-22.
13. Dalati T, Hussein MR. Juvenile pleomorphic adenoma of the cheek: a case report and review of literature. Diagnostic Pathology. 2009 Mar:4(32):1-5.