

Ectopic salivary gland tissue: A case report

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Abstract

Heterotopic salivary gland tissue is often found in lymph nodes within or near the parotid gland in both new born infants and in adults. It can also occur in other areas of the neck including the supraclavicular area. In this report we present a six year old male child who attended the surgical ward of Al-Rafidain Private Hospital in Baghdad city with history of painful swelling in the right side of his face (Parotid area). Surgical excision of the mass have been done, the histopathological examination revealed inflammatory changes of salivary gland tissue (Sialadenitis) with diffuse lymphocystic infiltration, which indicate a chronic case of Sialadenitis.

Case Report

A six year old male child from AL Mosul City attended to the surgical ward of Al-Rafidain Private Hospital in Baghdad City on May 2007 complaining of repeated attacks of painful swelling in the right side of his face for about three months duration.

The last attack was sudden in onset, the pain was continuous, aggravated by talking and chewing. Clinical examination showed that the swelling lies just anterior to the right parotid area (Fig 1), size of the mass was about 1-2 cm in diameter, tender, rounded with smooth surface, firm in consistency non compressible, the swelling was not fixed to underlying tissue nor to the skin, and become prominent on contraction of mastication muscles.

The upper deep cervical lymph nodes were enlarged and tender. The facial nerve function was intact, oral cavity examination was normal; haematological investigations revealed no abnormality, X-ray of the affected site showed no abnormal opacity.

Complete surgical excision have been done to the mass, which revealed that the mass is located anterior to the normal anatomical region of parotid gland, and it is also located outside the parotid capsule and not connected neither to the parotid duct nor to the parotid gland, and the tissue biopsy sent to the histopathological examination which revealed salivary tissue infiltrated by

lymphocystic cells with no malignant changes (Fig 2, 3)

Discussion

Heterotopic salivary gland tissue is often found in lymph nodes within or near the parotid gland in both newborn infants and in adults (1).

It can also occur in other areas of neck, including the supraclavicular area (2). The most common location being along the medial border of the right sternocleidomastoid muscle near the sternoclavicular joint.

The majority of cases were associated with cysts or sinus tracts, suggesting an embryologic relationship with the branchial apparatus (3). A variety of neoplasms can develop from heterotopic salivary gland tissue. Warthins tumor is by far the most frequent (4,5).

Heterotopia of salivary gland tissue has been divided into intranodal and extranodal type (1). The case of this report is belong to extranodal type of high form. Intranodal variety is the most frequent. Almost all lymph nodes located within or near the parotid gland in infants contain salivary gland tissue (2). Salivary gland tissue is usually located in the medullary portion of the node and is predominantly composed of intercalated and interlobular

ducts. It may also contain acini and small ducts of immature type (3).

Extranodal heterotopia has been divided into high and low forms, depending on its location in the head and neck region. Site of high heterotopia are probably all the results of abnormalities in the embryonic migration of the salivary glands (4).

Low heterotopia is related to the branchial pouches and is found in association with cysts and sinuses in the lower neck and the thyroid gland (5,6,7,8). Young LA, Scoffield HH, have described eleven cases of ectopic salivary tissue, and the most common location was in the medial border of right sternocleidomastoid muscles near the sternoclavicular joint, ectopic salivary gland tissue is often found in lymph nodes within or near the parotid gland (4), in the case of this report there was no lymph nodes infiltration by salivary gland tissue but the salivary gland tissue was infiltrated by lymphocytic cells.

Heterotopic salivary tissue is subject to the same pathological changes as its orthotopic counterpart including cystic formation, oncocystic metaplasia, ductal hyperplasia and neoplasms (9,10). Among the latter, Warthin's tumour is the most frequent, but several other benign and malignant types have been described (11).

We concluded that this case was a sort of ectopic salivary gland tissue according to the surgical and histopathological findings, so any mass in the face or in the neck should be excised and send for histopathological examination to exclude any form of ectopic salivary gland tissues because this type of ectopic tissue may be changed to oncocystic metaplasia, ductal hyperplasia and neoplasms, among the latter Warthin tumor is the most frequent.

References

1- Brown RB, Gaillard RA, Turner JA: Significance aberrant or heterotopic parotid gland tissue in lymph nodes, *Ann Surg*, 1993,138: 850 – 6.

2- Jernstrom P, Prietto CA: Accessory parotid gland tissue at base of neck, *Arch Pathol*, 1992, 73: 473 – 80.

3- Singer MI, Applebaum EL, Loy KD: Heterotopic salivary gland tissue in the neck, *Laryngoscope* 1999, 89: 1772 – 7.

4- Young LA, Scoffield HH: Heterotopic salivary gland tissue in the lower neck. *Arch Pathol* 1987, 83: 550 – 6.

5- Martinez – Madrigal F, Bosq J, Casiraghi O. Major salivary glands. In Sternberg SS (ed): *Histology for pathologists*, 2nd ed. Philadelphia, 1997, lippincott – Raven, pp. 418 – 9.

6- Shinohara M, Harada T, Nakamura S, Oka M, Tashiro H. Heterotopic salivary gland tissue in lymph nodes of the cervical region. *Int J Oral Maxillofacial Surg* 1992, 21: 166 – 71.

7- Carney JA. Salivary heterotopia, cysts, and the parathyroid gland: Branchial pouch derivatives and remnants. *Am J Surg Pathol* 2000, 24: 837- 47.

8- Evans MG, Rubin SZ. Pleomorphic adenoma arising in a salivary rest in childhood. *J Pediatr Surg* 1991, 26: 1314 – 5.

9- Ludmer B, Joachims HZ, Ben – Arie J, Eliachar I. Adenocarcinoma in heterotopic salivary tissue. *Arch Otolaryngol* 1981, 107: 547 – 8.

10- Luna M, Monheit J, Salivary gland neoplasms arising in lymph nodes. A clinicopathologic analysis of 13 cases (abstract). *Lab invest* 1988, 58: 58 A.

11- Rosai and Ackerman, S : *Surgical Pathology*, ninth ed: 874.



Figure (1): Swelling in the face.

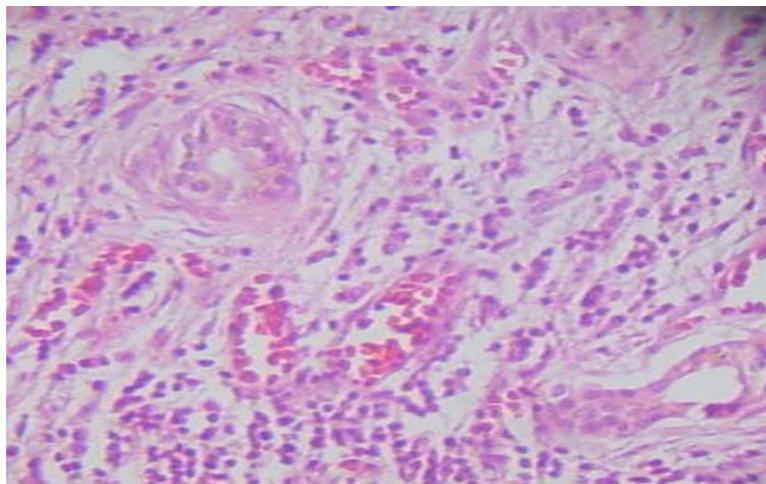


Figure (2): Salivary gland tissue show heavy chronic inflammatory cells infiltration with extensive loss of acini

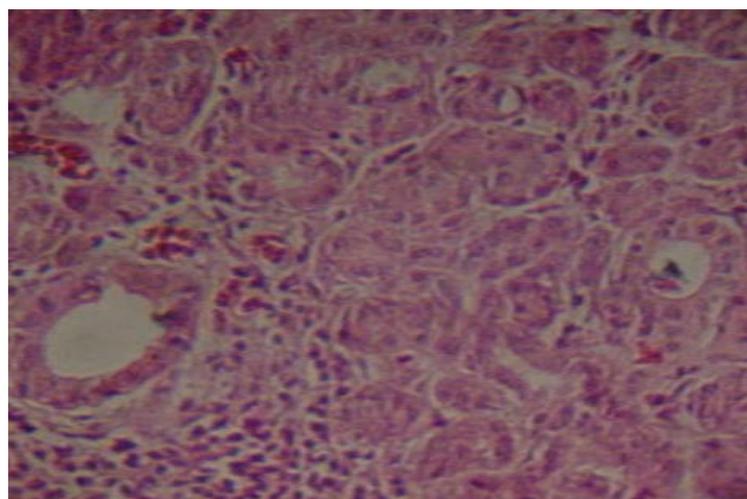


Figure (3): Salivary gland tissue show glandular acini with no secretory activity, few ducts and lymphocytic infiltration at the margin.