

Pleomorphic Adenoma of the Glossotonsillar Sulcus: A Rare Presentation

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Abstract

Background: Pleomorphic salivary adenomas (PSA) are the commonest salivary tumor and are benign neoplasms that affect mostly the parotid glands. PSA's can however affect the minor salivary glands, typically around the palate. The treatment of choice for minor gland PSA's is via complete surgical excision and close monitoring to exclude recurrences. **Case Report:** We describe here a rare case of a minor salivary gland pleomorphic adenoma arising from the glosso-tonsillar sulcus in a 41-year-old patient. The presented tumor was treated with full surgical excision and was followed-up with regular MRI scans to rule out recurrences. **Conclusion:** PSA's of the minor salivary glands are uncommon and should be treated with a high level of suspicion due to a high malignant potential.

Keywords: Brain Neoplasms, Minor Salivary Glands, Palate, Parotid Gland, Pleomorphic Adenoma.

Introduction

Tumors of the minor salivary glands of the upper aero-digestive tract are rare, accounting for up to 20% of tumors of salivary glands [1]. These tumors are more likely to be malignant as compared to tumors of the major salivary glands, although benign tumors are still common place [2]. The most frequently encountered benign tumor is the pleomorphic adenoma which usually occurs in the palate at the junction between the hard and soft palate [3,4], although other intraoral sites have been reported [1,4-7]. We present here a rare occurrence of a pleomorphic adenoma arising from right glosso-tonsillar sulcus.

Case Report

A 41 year old female patient presented to the ear, nose and throat (ENT) clinic with a four month history of a progressive feeling of globus, the sensation of food sticking in her throat. and persistent sore throat. She did not report any history of trauma, dysphonia or odynophagia. In

addition there was no history of weight loss. The patient's past medical history was unremarkable aside from a tonsillectomy at the age of 15. The patient was a non-smoker and consumed moderate amounts of alcohol. On examination there was a large pedunculated cystic lesion on a stalk arising from the lower pole of the right tonsillar fossa and tongue base. A provisional diagnosis of a benign lingual tonsil cyst was made. Clinically the lesion had benign appearances therefore imaging was deemed unnecessary and a decision was taken to proceed for complete surgical excision for histological analysis. Surgical excision under general anaesthesia plus pharyngo-laryngoscopy took place approximately one month following initial assessment in clinic on a routine basis. Intra-operatively, the patient had a superficial lesion at the right lingual tonsil/tongue base area that was dissected fully without being ruptured with bipolar diathermy [Fig.1-3]. Otherwise, the larynx, pharynx and hypo-pharynx were normal in appearance.

The excised operative sample measured 20 × 12 × 10 mm and was sent for a routine histological analysis. The microscopic examination revealed a minor salivary gland containing a circumscribed encapsulated tumour composed of ductal epithelial cells arranged in small islands, with a trabeculated and corded pattern mixed with chondromyxoid stroma [Fig.4]. This was reported as being consistent with a cellular pleomorphic salivary gland adenoma in a minor salivary gland of the glosso-tonsillar sulcus.

Surgical excision as day case surgery was successful and uncomplicated. Ten days post-operatively the patient had a minor secondary hemorrhage that resolved with conservative measures. Given the clinical, radiological and histopathological findings, the patient has been listed for regular outpatient follow-ups with periodic MRI scans of the head and neck to rule out recurrences. No recurrence of the tumor has been reported to date.

Discussion

Minor salivary glands are small mucous glands found throughout the upper aero-digestive tract. Common locations of PSA of the minor salivary glands are the palate, buccal mucosa, lips and retro-molar area [4,6]. Rare cases have been reported in the nasopharynx [1] and para-pharyngeal space [7]. Clinically these tumors tend to be slow growing and usually present as an enlarging mass; other symptoms include location-specific symptoms such as odynophagia (such as our case), or compression symptoms such as cranial nerve palsies [1,3,5,6,7]. The differential diagnosis should include other benign growths (mucocele, myoepithelioma, monomorphic adenoma), as well as malignant tumors of which the most common minor salivary gland tumour is an adenoid cystic carcinoma. Symptoms that are suspicious of malignancy include pain, bleeding, loosening of teeth and ulceration (unless as a consequence of trauma) [3]. Although the majority are benign,

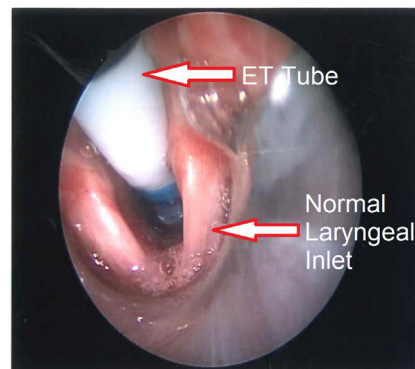


Fig.1: Intra-operative image of tonsillar fossa and tongue base after intubation.

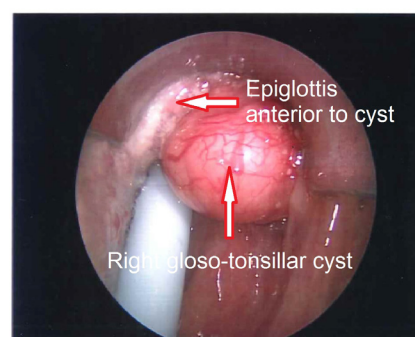


Fig.2: Intra-operative appearance of pleomorphic adenoma.

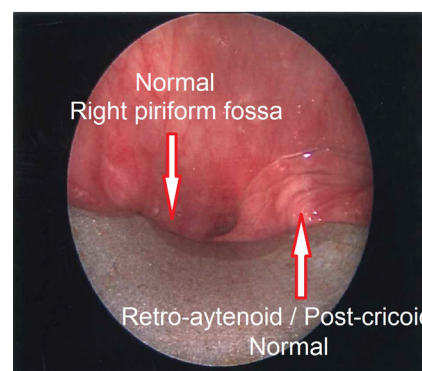


Fig.3: Intra-operative image of tonsillar fossa post-resection.

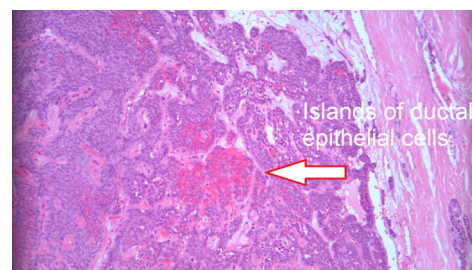


Fig.4: Microscopy of cyst.

there are malignant varieties of PSA (carcinoma ex pleomorphic adenoma, carcinoma sarcoma and metastasising PSA) which should be kept in mind and can be accurately differentiated on histological analysis [1].

The diagnosis of PSA is carried out through careful clinical assessment, histological analysis, and complementary imaging, usually in the form of MRI [1,3,4,6]. Surgical excision is the mainstay of treatment with no role for radiotherapy or chemotherapy initially, although it can be considered in recurrent disease [1]. PSA's classically have a thin incomplete capsule; therefore, complete surgical excision with a cuff of surrounding healthy tissue should be carried out while every effort should be made to preserve vital adjacent structures [4]. For tumors such as the one described here an intraoral approach is appropriate and advisable. It is advised that long term follow-up should occur due to the high risk of recurrence and malignant potential [8,9].

Conclusion

We have presented here a rare case of this tumor in the right glossotonsillar sulcus. In the light of literature review and the details of this case we recommend that all similar cases should be treated with a high index of suspicion, as most minor salivary glands tumors are malignant.

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References

1. Thakur JS, Mohindroo NK, Mohindroo S, Sharma DR, Thakur A. Pleomorphic adenoma of minor salivary gland with therapeutic misadventure: a rare case report. *BMC Ear, Nose and Throat Disorders*. 2010;10:2
2. Abrahao AC, Santos Netto Jde N, Pires FR, Santos TC, Cabral MG. Clinicopathological characteristics of tumours of the intraoral minor salivary glands of 170 Brazilian patients. *Br J Oral Maxillofac Surg*. 2016;54:30-34.
3. Wysznska-Pawełec G, Gontarez M, Zapala J, Szuta M. Minor salivary gland tumours of the upper aerodigestive tract: A clinicopathological study. *Gastroenterology Research and Practice*. 2012;780453.
4. Cummings CW, Harker LA, Krause CJ, Richardson MA, Schuller DE, Krause CJ *et al.* Cummings Otolaryngology: Head and Neck Surgery, Third Edition, St. Louis, Mosby, 1998.
5. Rao PK, Shetty SR, Hegde D. Ectopic pleomorphic adenoma. *North Am J Med Sci*. 2012;4:190-192.
6. Hakeem AH, Hazarika B, Pradham SA, Kannan R. Primary pleomorphic adenoma of minor salivary gland in the parapharyngeal space. *World J Surg Onc*. 2009;7:85.
7. Laturiya R, Kasim JS, Jankar AS, Mohiuddin SA. Pleomorphic adenoma of minor salivary gland arising de novo in the parapharyngeal space – a rare case report. *J Clin and Diag Res*. 2016;10:ZD01-ZD03.
8. Qureshi Y, Khan TA, Dhurjati VNN, Gaddikeri K, Khany ZE. Pleomorphic adenoma in retromolar area: a very rare case report and review of the literature. *J Clin and Diag Res*. 2016;10:ZD03-ZD05.
9. Mubeen K, Vijayalakshmi KR, Patil AR, Giraddi GB, Sing C. Benign pleomorphic adenoma of minor salivary gland of palate. *J Dent Oral Hyg*. 2001;3:82-88.