



Voluminous Pleomorphic adenoma of the lateral side of the tongue

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Abstract

Pleomorphic adenoma (PA) of the tongue is extremely rare, with incidence ranging from 0% to 2.5% of tumors originating from minor salivary glands. PA of the tongue is commonly seen in the posterior, followed by anterior, and rarely in the lateral side of the tongue. We report a rare case of voluminous pleomorphic adenoma of the right side of the tongue in a 58 years old female patient.

Keywords: Pleomorphic adenoma; Minor salivary glands; lateral side of the tongue

Introduction

Pleomorphic adenoma (PA), also known as a mixed tumor, is the most common benign tumor in salivary glands. It accounts for 40–70% of accessory salivary gland tumors ^[1]. The affection of the tongue is extremely rare with an incidence ranging from 0 to 2.5 % from all the accessory salivary glands pleomorphic adenoma. PA is seen more frequently in the base of the tongue, followed by the anterior, and rarely in the lateral side of the tongue ^[2]. We report a rare case of pleomorphic adenoma of the right side of the tongue in a 58 years old female patient.

Case report

A 58 -year-old female was referred to our department with a 6-month history of a gradually increasing mass in the right side of the tongue, associated with eating and talking difficulties. No other symptoms were found on the physical examination, a well-circumscribed, sub mucosal mass measuring 4 cm*3cm was found in the right side of the tongue. The Surface of the mass was smooth with no mucosal abnormalities. On the palpation, the mass was firm, painful, non-pulsatile and with no compressive signs. There were no signs of loco-regional invasion and no palpable lymphadenopathy. The rest of her physical examination didn't show any further signs Fig 1. The Magnetic resonance imaging (MRI) revealed a contrast-enhancing mass of heterogeneous density in the right side of the tongue of 3 cm*3cm*2cm Fig 2. A Biopsy under loco-regional anesthesia was performed and the histologic examination study concluded to pleomorphic adenoma. A total tumor's excision was performed under general anesthesia, using lateral glossectomy as a surgical approach. The histopathological examination of the surgical specimen confirmed the diagnosis of pleomorphic adenoma fig 3. No postoperative complications were noted and the patient was discharged 2 days after surgery. The patient is free of recurrence during the 5 months follow up period.

Discussion

Pleomorphic adenoma is the most common benign tumor of the accessory salivary glands ^[3]. In the oral cavity, its most frequent

site is the palate followed by the lips and buccal mucosa, while the affection of the tongue is very rare accounting for 0-2.5% of the cases ^[4]. PA is more common in women and usually occurs between the 4th and 6th decade of life ^[5] The Clinical presentation depends on the location and the size of the tumor. Mostly, PA presents as asymptomatic, slow growing firm and painless mass. Small neoplasm form mobile, smooth, firm mass but larger tumors tend to become bumpy and may attenuate the overlying mucosa ^[6]. PA of the tongue is generally manifested by dysphagia and difficulty of talking. The other symptoms that can be found are pain, muffled phonation, airway obstruction depending upon the size and the location of the mass ^[2, 4]. The imaging studies particularly magnetic resonance imaging (MRI) provides information on the nature and extent of the tumor, the status of the surrounding tissues and involvement of the lymph nodes ^[6]. Pleomorphic adenoma of the accessory salivary glands is characterized by a moderately high signal on T2-weighted imaging because of the reduced presence of myoepithelial cells, which produce a myxoid stroma ^[7]. Because of the possibility of local recurrence or carcinoma cells in pleomorphic adenoma, treatment of pleomorphic adenoma is wide surgical excision with adequate safety margins ^[8]. Macroscopically, PA seems to have a capsule. However, it's not a real one. The compressed normal salivary gland tissue takes the form of a false capsule ^[9]. Histologically, PA is a mixed tumor. Its composed by epithelial and myoepithelial cells with differentiated mesenchymal tissues. ^[2] The epithelial component presents as ducts or cystic structures. Myoepithelial cells are also observed, which appears as angled cells, fusiform, or rounded, with eccentric nuclei and eosinophilic cytoplasm. The stromal component presents a large morphological spectrum. ^[10] Recurrence is not uncommon. Approximately 20–45% of pleomorphic adenomas recur, and 2-9% will degenerate to malignant tumors ^[4]. The cause of recurrence in pleomorphic adenoma is still controversial. Intraoperative tumor spillage is believed to be the main cause; however, several studies have suggested incomplete initial resection to be the principle cause. ^[8]

Figures



Fig 1: Photograph showing a well defined mass in the right side of the tongue measuring 4x3 cm.

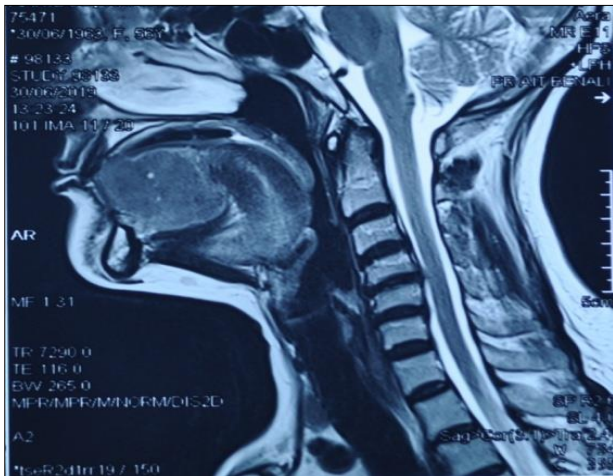


Fig 2: Magnetic resonance image showing the tumor.

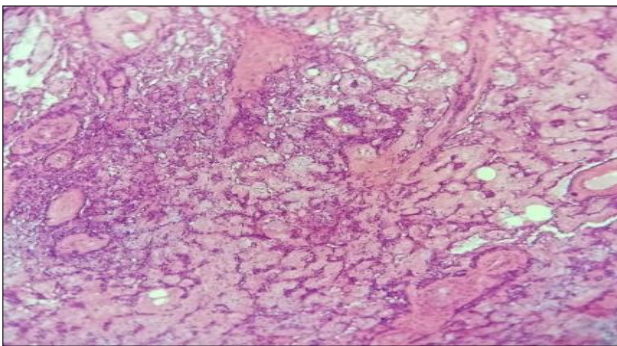


Fig 3: Microphotograph of pleomorphic adenoma.

Conclusion

Pleomorphic adenoma of the lateral side of the tongue is a rare condition. The treatment of choice is a complete wide surgical excision. Considering the possibility of recurrence or malignant transformation long term follow up is essential.

Conflict of interest

The authors declared that there are no conflicts of interest.

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