



“PLEOMORPHIC ADENOMA OF THE PAROTID GLAND: REPORT OF A CASE AT OUR HOSPITAL”

Dr. Gaurav Ahluwalia*

Consultant ENT Surgeon, Ahluwalia Hospital, Raipur, Chhattisgarh. *Corresponding Author

ABSTRACT **Background:** Pleomorphic adenomas are benign salivary gland tumors, which predominantly affect the superficial lobe of the parotid gland. The “pleomorphic” nature of the tumor can be explained on the basis of its epithelial and connective tissue origin. The tumor has a female predilection between 30–50 years of age. Slowly progressing asymptomatic swelling is the usual presentation of the tumor. Surgical excision of the tumor mass forms the mainstay of treatment, with utmost care taken to preserve the facial nerve. **Case Details:** This case report aims to throw light on an interesting case of pleomorphic adenoma of the parotid gland in a 58 years old female patient. The patient presented with a slowly progressing asymptomatic swelling on the right side of the neck. There is also a special emphasis to a detailed review of literature. **Conclusion:** Salivary gland neoplasms can occur at any site where salivary tissue is present. Pleomorphic adenoma is the commonest salivary gland tumor characterized by diverse histomorphological features. Early diagnosis and treatment plan entails thorough history taking, clinical examination, coupled with radiographic and histopathological findings.

KEYWORDS : salivary gland neoplasms, pleomorphic adenoma, histomorphological features, radiographic and histopathological findings.

INTRODUCTION

Pleomorphic adenoma is a common benign tumor of the salivary gland. These lesions account for two-thirds, or approximately 60%-65%, of all salivary gland tumors [1]. It shows a female predilection and is most commonly seen in the fourth to sixth decade of life. The tumor progresses as an asymptomatic slow growth over a prolonged period of time. The lesion originates most commonly from the major salivary glands, most commonly the parotid gland, although cases of occurrence in minor salivary glands have also been reported. Lips and palate are the most common sites; 20%-40% of all intraoral pleomorphic adenomas have been associated with the minor salivary gland. While the etiology of pleomorphic adenoma still remains elusive, it is known to be epithelial in origin, and clonal chromosome abnormalities with aberrations involving 8q12 and 12q15 have been implicated [2]. Here we report a case of pleomorphic adenoma in a 58-year-old female patient.

CASE REPORT

A 58-year-old female patient reported to ENT OPD of Our hospital with presenting complaints of right side neck mass hanging from right sided pre-auricular and mandible margin area with a base of approximately 8 by 12 cm attached to face since last 10 years. There were no other symptoms (e.g., numbness, dysphagia, stridor, speech, or masticatory difficulties) due to the lesions. There was no history of trauma, fever, or similar swelling elsewhere in the body. Past medical history revealed the patient was healthy and had no systemic diseases nor deleterious habits.

On general physical examination, the patient was moderately built and conscious, with a normal gait. His vital signs were within normal limits. The extraoral examination showed no facial asymmetry or lymphadenopathy. Battery of investigations were done pre-operatively, all the routine blood investigations were within normal limits.

Radiological investigations (CTCE of neck and face) revealed large pedunculated roughly round shaped heterogeneous solid necrotic mass lesions noted at right side of the neck. Base of the lesion is noted at right parotid and right angle of mandibular region, the likely impression is that the mass lesion is arising from right parotid gland. Right parotid gland is not visualised separately, concluded the final impression as Benign Neoplastic Lesion of Right Parotid Gland and correlate with histopathological findings.

After pre-operative surgical fitness, the tumour was excised under local anaesthesia. The tumour was weighing 2 Kgs, with following peculiarities,

- Marginal mandibular nerve preserved
- Facial nerve preserved
- Local rotation flap of the skin used to cover the facial defect
- Entire surgery done under local anesthesia
- Histopathology showed polymorphic adenoma of the superficial lobe of parotid gland.



Figure 1: Shows Preoperative View Of The Tumour

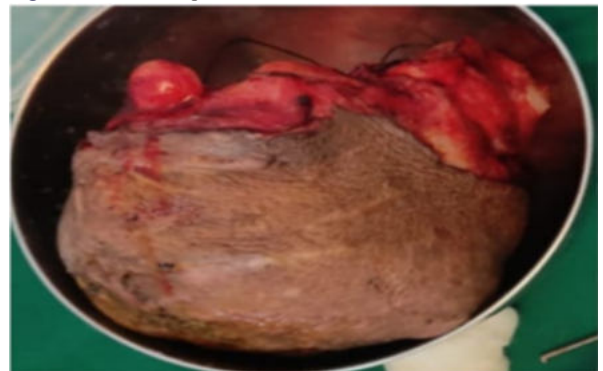


Figure 2: Shows Excised Tumour



Figure 3: Shows Postoperative View

DISCUSSION

Pleomorphic adenoma is a tumor that is often associated with major salivary gland especially the parotid gland. However, its involvement with minor salivary glands has been described as well. Shreshta et al. stated in their study that pleomorphic adenoma with respect to the upper lip is more common than those of the lower lip by a ratio of 6:1 [2].

Kroll and Hick reviewed 4042 cases of pleomorphic adenomas of the salivary glands and found that 445 originated in the minor salivary glands; 16.9% of the tumors originating in the minor salivary glands were located in the upper lip and 2.9% were in the lower lip [2].

The increased occurrence of tumors in the upper lip could be attributed to the fact that the upper lip develops from the fusion of three complex embryonic processes. Compared to the lower lip, the upper lip has a greater probability of embryonic cell nests being entrapped. This increases the risk of tumor formation in the upper lip [3].

Pleomorphic adenomas usually present as a well-circumscribed mass. Tumors arising from minor salivary glands are histologically similar to those arising from the major salivary glands, although the former tend to be cellular with only a very minimal stromal and cartilaginous component [4]. Although an encapsulated, solid, mobile nodule, as seen in our cases, is characteristic of a benign lesion, a biopsy is necessary to confirm the absence of malignancy [5]. Minor salivary gland tumors may be seen clinically as a soft or firm mass, with most of them having a nodular, exophytic component. The invasiveness of the tumor cannot be confirmed if the ulceration of the nodular mass is seen. Tumors that contain large cystic cavities and abundant mucin may be clinically soft on palpation [5]. The patient may not be aware of their existence as these lesions are clinically asymptomatic and it may be discovered on routine examination.

Pleomorphic adenoma is essentially a benign tumor. Nevertheless, aggressive behavior of the lesion has been described; there have been instances of the tumor invading neighboring vessels in the absence of any other features of malignancy [6]. In their case series, Yih et al. observed that pleomorphic adenoma is the most common minor salivary gland tumor, followed by mucoepidermoid carcinoma; they found that among the minor salivary gland tumors occurring in the lips, benign tumors are usually seen in the upper lip; whereas, malignant tumors are usually seen in the lower lip [7-8]. Jansisyanont et al. [9] also stated that pleomorphic adenoma was the most common benign tumor involving the minor salivary gland.

Vicente et al. [10] observed an increased risk of recurrence with incomplete excision of the minor salivary gland. Furthermore, the possibility of malignant transformation of the tumor should be taken into consideration, and periodic clinical evaluation of the patients is necessary. There was one particular study by Martinell et al. [11, 12] that showed the association of simian virus with the occurrence of pleomorphic adenoma of the parotid glands. No other predisposing or risk factors have been attributed to the occurrence of pleomorphic adenoma in literature.

CONCLUSION

Pleomorphic adenoma is a benign neoplasm most commonly seen originating from the parotid gland. Here, we reported two unusual situations of pleomorphic adenoma involving the minor salivary glands with identical clinical and demographic characteristics with respect to location, size, and history of the lesion. Such an occurrence at the same period of time is quite rare and noteworthy.

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