

**CASE REPORT**

**HUGE SUB-MANDIBULAR GLAND TUMOUR**

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Salivary gland neoplasms are a diverse group of tumours and appropriate treatment depends on adequate understanding of the pathophysiologic behaviour of each tumour type. Most (95%) salivary glands occur in adults. Benign tumours are slow growing tumours and attain a considerable size before presenting to surgeon. We report a case of huge tumour of left sub-mandibular gland that presented in our surgical outpatient department, and had developed over last twenty years. It was diagnosed as a benign mixed tumour of salivary gland and was successfully excised. Histopathology confirmed it to be a benign pleomorphic adenoma.

**Keywords:** Salivary gland neoplasm, Sub-mandibular gland, Pleomorphic adenoma

**INTRODUCTION**

Salivary gland neoplasms are a diverse group of tumours and appropriate treatment depends on adequate understanding of the patho-physiological behaviour of each type. Approximately 80% of the salivary gland neoplasms originate in parotid gland, 15% develop in the sub-mandibular gland and the remaining tumours arise in the sublingual and minor salivary glands.<sup>1</sup> Eighty percent of parotid neoplasms, 50% of submandibular neoplasms<sup>2</sup>, and fewer than 40% of sublingual and minor salivary tumours are benign.<sup>3</sup> Most (95%) salivary gland neoplasms occur in adults. Pleomorphic adenoma is a slow growing tumour and may attain very large size. We present a case of huge pleomorphic adenoma of left sub-mandibular gland that had been slowly growing for last 20 years. Such a huge and bulky sub-mandibular tumour is not documented in international literature.

**CASE REPORT**

A 72 years old lady presented with a huge swelling at sub-mandibular region for the last 20 years. Her presenting complaint was interesting that she could not walk now with such a huge and heavy lump. It was painless and not associated with dyspnoea or dysphagia. There was no history of fever or weight loss. Local examination revealed it to be multi-lobulated with normal overlying skin. It measured 25×15×13 Cm. Swelling was firm in consistency and not fixed to underlying structures. There was no cervical lymphadenopathy. (Figure-1) Rest of the general physical and systemic examination was unremarkable.

Routine haematological investigations were normal. X-ray soft tissue of neck showed no abnormality except soft tissue opacity (the mass itself). FNAC revealed benign mixed tumour of salivary gland. Surgery was planned and tumour was excised under general anaesthesia. Excised tumour weighed 5.3 Kg. Suction drains were removed after 48 hours. Recovery was uneventful and patient was

discharged from hospital on 5<sup>th</sup> postoperative day (Figure-2). Histopathological report described the tumour as pleomorphic adenoma.



**Figure-1: Huge Sub-mandibular tumour (preoperative)**



**Figure-2: After excision**

## DISCUSSION

Benign mixed tumours are the most common neoplasms of salivary glands and are composed of an admixture of benign glandular epithelia and mesenchymal component such as myxochondroid, mucoid or hyalinised fibrous stroma.<sup>4,5</sup> The term benign mixed tumour was first proposed by Minssen in 1874 to describe the two components of the tumour, mesenchymal and epithelial.<sup>6</sup> Some of them (2–9%) are known to undergo malignant change.<sup>3</sup> Benign tumours are more common in women,<sup>7</sup> but malignant tumours have an equal sex distribution.<sup>1</sup> This corresponds to our patient's age and sex as she was a 72-year-old female. Aetiological factors for salivary gland neoplasms are not well understood. Low dose radiation has been implicated in their development,<sup>8,9</sup> but we could not find any such relationship in our case.

No single feature or group of features leads to a clinical diagnosis of a specific tumour type.<sup>10</sup> Almost all patients with salivary gland tumours present with a swelling in the region of respective gland. Our patient had a huge lump at her left sub-mandibular region for the last 20 years, and had no pain in the swelling but this clue does not distinguish benign from malignant lesions. She presented with an interesting complaint that she could no more hold the huge and heavy lump while standing and walking. So she came to the outpatient clinic for treatment. Interestingly, she was not bothered about disfigurement of her face at all!

Fine needle aspiration with a thin 22G needle has become increasingly popular for all salivary gland lesions and gives a fairly accurate diagnosis preoperatively.<sup>6</sup> The superficial location of sub-mandibular gland makes it ideal for ultrasound evaluation as a useful adjunct to clinical assessment.<sup>11</sup> The CT and MRI can be used for extensive lesions to know their exact extent. FNAC of our patient revealed benign mixed tumour of salivary gland. As the diagnosis was confirmed, we didn't go for ultrasound, CT, or MRI.

The treatment of salivary gland neoplasms is challenging because of their rarity, the unpredictable and varied biologic behaviour, and risk of delayed recurrence. The basic approach to a salivary gland neoplasm is operative, aiming at complete excision. In our case as well, the tumour was excised under

general anaesthesia. The excised mass weighed 5.3 Kg.

Histopathology described the excised tumour as pleomorphic adenoma. It is the most common neoplasm of the salivary glands, accounting for the majority of benign tumours.<sup>12–16</sup> Long-term follow-up (10–20) years) is essential for evaluation of therapeutic results with salivary gland tumours but is seldom feasible in our setup.

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