



PARAPHARYNGEAL SPACE PLEOMORPHIC ADENOMA PRESENTING AS PERITONSILLAR ABSCESS.

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ABSTRACT

The parapharyngeal space tumors are one of the most challenging head and neck tumors for diagnosis and treatment. The most common tumor arising from PPS is pleomorphic adenoma. The tumor mostly has female predilection. The usual presentation is slowly progressive asymptomatic swelling in this region. In this case report, patient presented with oropharyngeal mass. Aim of this case report is the atypical presentation of the tumor as peritonsillar abscess and its line of diagnosis and treatment. Surgical excision of tumor forms main stay of treatment.

KEYWORDS

Parapharyngeal Space Tumor, Pleomorphic Adenoma, Histopathological Examination

INTRODUCTION

The parapharyngeal space (PPS) is a well-defined anatomic region extending from the skull base to the hyoid bone. This deep anatomical space has the shape of an inverted triangular pyramid with a base, a vertex, and 3 walls. The base (upper limit) is the petrotympanic region of the temporal bone, and the vertex (lower limit) is the greater horn of the hyoid bone. The external wall comprises the sternocleidomastoid muscle and its aponeurosis, the superficial cervical aponeurosis lining the parotid, and the ascending branch of the lower jaw, with the pterygoid and masseter muscles. The medial wall is formed by the lateral face of the pharynx. The posterior wall is formed by the aponeurosis, the prevertebral muscles and the cervical transverse apophyses^[1].

Parapharyngeal space is one of the potential facial planes of head and neck that may become involved by various pathological processes. The most common tumors arising in the PPS of salivary gland origin is pleomorphic adenoma which account for 80- 90% of PPS lesions and are located in the prestyloid compartment^[2]. The massive parapharyngeal space pleomorphic adenoma will present as oropharyngeal mass causing dysphagia and dyspnoea^[3]. The atypical presentation as in the case report can be as peritonsillar abscess^[4]. Early diagnosis and radical surgical management decreases morbidity associated with it.

Case Study

A 19-year-old patient from Dausa, Rajasthan presented in department of otorhinolaryngology, SMS Medical college with chief complaint of dysphagia and progressive swelling in left tonsillar region for 2 months duration. As mass was mimicking peritonsillar abscess, it was drained previously 1 month back and antibiotics course was given. On intraoral examination, there was a firm bulge of left soft palate and left pharyngeal wall crossing midline and pushing the uvula to right side. He had no fever. Clinical examination did not reveal involvement of any cranial nerves. CT scan neck showed hypodense lesion measuring 52x42x63mm abutting left lateral wall of oropharynx. CT carotid angiography was done which was suggestive of hypodense lesion measuring 18x34x61mm in left parapharyngeal region along left lateral wall of oropharynx not showing enhancement in arterial phase. No other obvious mass/ lymphadenopathy was seen. The patient underwent surgical excision of the lesion through transoral approach with left tonsillectomy. On gross examination, mass was measuring around 6cm x 5cm x 3 cm. Histopathological examination (HPE) showed cystic masses comprising of myxohyaline areas with fibroblastic proliferation and extensive mucinous areas suggestive of salivary gland neoplasm. Further immunohistochemistry study was done in which myoepithelial cells were found positive for CK, calponin, S100, SMA and P63 which favours diagnosis of pleomorphic salivary adenoma. Patient has been followed up postoperatively for 8 months and is disease free till date.

DISCUSSION

Parapharyngeal space masses account for 0.5% of all head and neck tumors and majority is HPE benign (76%)^[2]. Salivary neoplasms may arise from superficial lobe and deep lobe of parotid, minor salivary glands and parapharyngeal space. Among the benign salivary gland

tumors seen in PPS, the most common prestyloid lesion is pleomorphic adenoma which represents 80- 90% of cases^[5]. These tumors present as submucosal swelling and other symptoms like otalgia, neuralgia and cranial nerve deficits can be seen. The diagnostic workup algorithm begins with haematological and serological tests followed by FNAC, CT and MRI studies should be part of preoperative diagnosis to determine the extend of disease, local spread and type of tumor. In parapharyngeal tumors, 25% of intraoral FNAC may not be diagnostic because of lack of adequate cellular material^[6]. Grossly, pleomorphic adenoma is well circumscribed, lobulated in appearance. On microscopy, pleomorphic adenoma is an epithelial tumor showing epithelial and myoepithelial components arranged in different patterns against a mucopolysaccharide stroma.

The surgical excision of these tumors can be by transoral approach, endoscope assisted transoral approach, transcervical approach and transpharyngeal approach with mandibular split. According to the study by Mendelsohn et al, the recurrence rate is 8% within 5 years of resection^[7].



FIG.1: Patient with swelling in left Tonsillar region

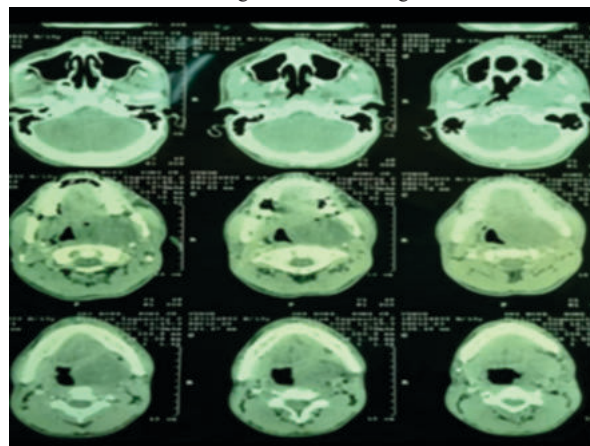


FIG.2: Pre-operative CT scan showing hypodense lesion

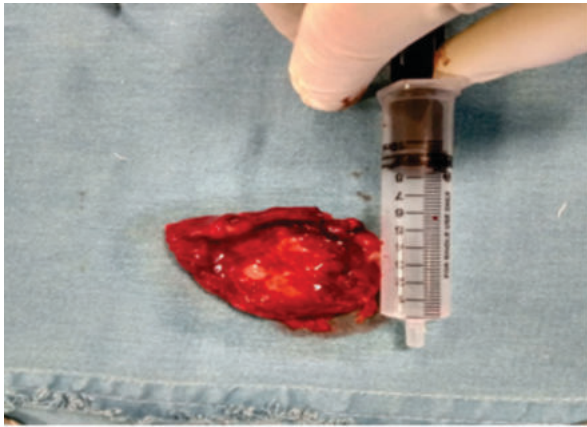


FIG.3: Intra-operative gross feature of mass measuring around 5x3 cm

CONCLUSION

Parapharyngeal pleomorphic adenoma presents a diagnostic challenge requiring histology for formal diagnosis. Radiological imaging to identify whether fat planes are preserved can distinguish between parotid and extra-parotid pharyngeal masses aiding diagnosis. The surgical approach used depends upon the extend of the tumor.

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