

Primary Pleomorphic Adenoma on Chest Wall: A Rare Case

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Abstract: Pleomorphic adenoma (PA) is the most common salivary gland tumor, accounting for about 40–70% of all major and minor salivary gland tumors. This tumor can occur also on other site including the upper lip, cheek, floor of mouth, larynx, trachea, bronchi. We present a case of 65-year-old man presented in out-patient department with history of 30 years painless pedunculated large multinodular swelling on left side of chest wall which is around 5-6 cm lateral to the left breast. After routine investigation, chest X-ray and FNAC patient underwent surgery for surgical excision of the mass and excised biopsy sent for histopathological examination which showed the diagnosis as benign pleomorphic adenoma. The postoperative period was uneventful. The patient was successfully discharged on day 10 and subjected to follow up.

Keywords: Pleomorphic adenoma, Chest wall, Abnormal site, Surgical treatment.

INTRODUCTION

Pleomorphic adenoma (PA) is the most common neoplasm of the large salivary glands, mostly affecting the parotid gland and less frequently the accessory salivary glands. Its name is derived from the architectural pleomorphism seen by light microscopy [1, 2]. It is a benign mixed tumor that is composed of epithelial and myoepithelial cells arranged with various morphological patterns [3, 4].

PA of salivary gland represents about 3-10% of neoplasm of the head and neck region [3, 4]. It accounts for 40–70% of all tumors of salivary gland [5-7]. The most commonly affected site is the palatal area (approximately 73%) [3, 8] followed by upper lip (17%) [4, 9]. Other intraoral sites of this tumor include buccal mucosa, floor of the mouth, tongue, tonsil, pharynx, and retromolar area [1, 2, 10].

We present a case report of Pleomorphic adenoma of unusual site—chest wall and till date there is no any case of chest wall Pleomorphic adenoma reported.

CASE REPORT

We present a case of 70 year male which was presented in our O.P.D. with complain of single large painless, pedunculated, multinodular swelling on left side of chest wall since last 30 years. Patient was admitted in surgical ward and evaluated further. Patient gave the history that swelling initially appear as a small pea nut size than enlarges slowly and progressively to

form large multinodular mass. On local examination, there was a 30 cm × 25 cm single large painless pedunculated multinodular mass around 5 cm lateral to left nipple (Fig. 1). The surface was smooth and bosselated. On palpation, the lesion was firm in consistency, nontender and movable in all direction with stump.



Fig. 1: Patient presented with 30 cm × 25 cm single large painless pedunculated multinodular mass around 5 cm lateral to left nipple

No any other significant medical and surgical history. General physical examination showed average built and nourishment. Routine investigations were within normal limit and chest x-ray finding were

normal. FNAC show the provisional diagnosis of Pleomorphic adenoma.

Patient underwent for surgical excision and on dissection swelling was not fixed to the chest wall muscle and ribs. Wide excision of the lesion with primary closure was carried out. The excised specimen was sent for histopathological examination. The microscopic findings revealed the presence of myoepithelial and epithelial cell proliferation. The cells were arranged in ductal pattern. There were areas of pseudocartilagel also seen (Fig. 2 & 3). A diagnosis of pleomorphic adenoma was rendered.

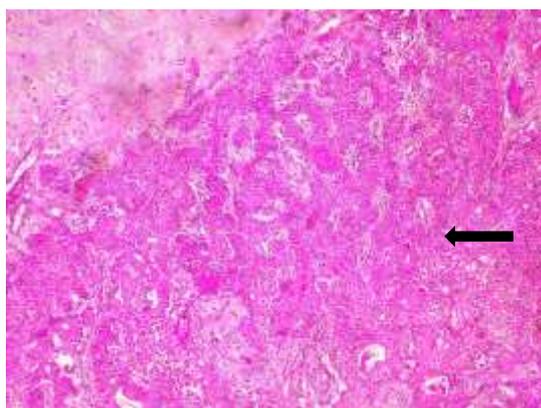


Fig. 2: Low power image of Pleomorphic Adenoma (Hematoxylin and Eosin, x10)

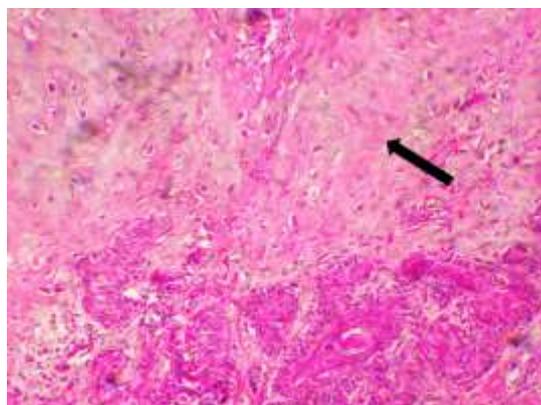


Fig.3: High power image of Pleomorphic Adenoma (Hematoxylin and Eosin, x20)

The postoperative period was uneventful. The patient was successfully discharge on day 10 and subjected to follow up.

DISCUSSION

PA is highly variable in appearance, classically biphasic. PA characterized by a mixture of polygonal epithelial and spindle-shaped myoepithelial cells in a variable background stroma which may be mucoid, myxoid, cartilaginous or hyaline [11].

Mostly these tumors arise in the major salivary glands (e.g., the parotid). In the minor salivary glands,

the most common site is the palate, followed by the lips. Other intra oral sites include buccal mucosa, floor of mouth, tongue, tonsil, pharynx, retromolar area, and nasal cavity [12, 13]. Pleomorphic adenoma arising on the chest wall is a rare occurrence.

A study conducted by Angelo Carretta *et al.* [14], showed salivary gland type mixed tumor (pleomorphic adenoma) of the lung. Study conducted by Jason Fitchett *et al.* [15], showed a rare case of primary pleomorphic adenoma in main bronchus. Study conducted by Rodriguez MJ *et al.* [16], showed a rare case of primary pleomorphic adenoma of trachea. Estemihan Aknet *et al.* [17], showed a case report of pleomorphic adenomas of the parapharyngeal Space. Neeraj Prajapati *et al.* [18] showed pleomorphic adenomas of soft palate a rare lesion. Shih-Hung Lo *et al.* [19], showed pleomorphic adenoma of the nasal septum.

To the best of our knowledge, till date, there is no case of pleomorphic adenoma arising from the chest wall reported.

The treatment of choice is surgical excision. The primary goal of excision should be complete removal of mass without risking recurrence [20]. Pleomorphic adenoma produces recurrence either due to spillage, inadequate removal or enucleation at the time of operation. It is not known to produce distant metastasis [13, 21]. The malignant transformation has been linked to recurrence and multiple excisions [13, 22].

CONCLUSION

Pleomorphic adenoma of the chest wall is a very rare occurrence. This lesion have a higher epithelial and lower stromal component compared to their major salivary gland counterparts. Although the recurrence rate is low under adequate excision, cases should be kept under observation due to the recurrence potential.

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