

A CASE OF GIANT PLEOMORPHIC ADENOMA OF THE PAROTID GLAND

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Abstract

Among salivary gland tumors pleomorphic adenoma is most common, majority of which are reported in parotid gland. Untreated pleomorphic adenomas can gradually enlarge in size and weigh several kilograms. We report a case of giant pleomorphic adenoma in a 32 year-old male who presented with a large swelling on the left side of the face, which progressively increased over a period of 7 years. The excised specimen was 20 cm × 32 cm × 14 cm in dimensions and 3.7 kg in weight.

Introduction

Pleomorphic adenomas of the salivary tissue are most commonly seen in parotid glands. Pleomorphic adenomas are slowly growing asymptomatic swellings, which steadily increase in size. The treatment is surgical removal of the tumor with an adequate amount of normal tissue. Average mass of these tumors seen clinically is between 2–6 cm in size, but if not treated in time they can grow into a huge mass weighing upto many kilograms. We share our experience of managing a huge size pleomorphic adenoma resected in our centre of 20 cm × 32 cm × 14 cm in dimensions, weighing 3.7 kg. According to our knowledge this is the largest pleomorphic adenoma seen in our part of the world.

Case report

A 32 year-old male seen in head & neck clinic with large mass on the right side of the face. This painless swelling gradually increased in size over a period of 7 years. Examination showed oval shaped multiple nodular swelling around right parotid region. Clinically size was 20 cm × 32 cm in dimensions and was firm in consistency, [Figure 1]. It was mobile and not fixed with deeper structures. Facial nerve was normal. No cervical lymphadenopathy was found



[Figure 1]



[Figure 2]

The lesion was clinically diagnosed as a benign tumor arising in the parotid gland and fine needle aspiration cytology reported it as a pleomorphic adenoma. Right superficial parotidectomy was done, whole tumor was excised with clear margins with preservation of the facial nerve. Macroscopically, the excised specimen was ovoid in shape and 20 cm × 32 cm × 14 cm in dimensions and weighed 3.7 kg. Microscopically, the tumor was composed of strands and islands of epithelial cells arranged in a myxochondroid stroma. Some areas showed solid sheets of epithelial cells. Ductal differentiation was frequent. There was no evidence of malignancy and the tumor was reported as a pleomorphic adenoma.

Discussion

Pleomorphic adenomas of the salivary gland can occur at any site where salivary gland tissue is present. It is the most common type of salivary gland tumor, which accounts for upto two thirds of all the salivary gland neoplasms. 85 % of the pleomorphic adenomas have been reported in the parotid gland, most of them arise within the superficial lobe, followed by a 10% in the minor salivary glands and 5 % in the submandibular glands. [1] Pleomorphic adenomas usually present as slow growing asymptomatic discrete swellings, which steadily increase in size. The tumors appears encapsulated but, on close observation, have pseudopod extensions into the surrounding tissues. The treatment is surgery with facial nerve recognition, removal of the tumor should include an adequate cuff of nearby parotid gland parenchyma. [2] Other less common sites are submandibular glands and minor salivary glands of the palate, buccal mucosa and upper lip. Average mass of these tumors is 2–6 cm in size after resection as reported in literature. [3] Huge size pleomorphic adenomas are rarely reported in parotid glands as a single mass which stretches the overlying skin. The weight of a huge pleomorphic adenoma is reported upto more than 8 kg and the weight appears to increase with the long history of the tumor. [4] In our case the resected tumor was 20 cm × 32 cm × 14 cm in dimensions and the weight of the excised sample was 3.7 kg. In a review of 31 giant pleomorphic adenomas of the parotid gland over a period of 140 years by Schultz-Coulon in 1989, mostly are seen in females (64.5%) and only 35.5% occurred in males. [5] Our patient was a 32-year old male who had noticed a gradually enlarging swelling for a period of more than 7 years. The weight of the giant pleomorphic adenomas reviewed by Schultz-Coulon varied between 1–26.5 kg. [5] The pleomorphic adenomas in our patient was 3.7 Kg. Development of secondary carcinoma in pleomorphic adenomas is 3–4% reported in the literature. [6] The series reviewed by Schultz-Coulon showed malignant changes in only 10% ($n=3$). [5] The occurrence of melanoma frequently shows an association between the long histories of pleomorphic adenomas. [6] The usual indication of malignancy arising in pleomorphic adenomas is rapid increase in size and local signs like pain, ulceration, spontaneous bleeding, and external and deep tissue incursion. [7] In other series reported by Spiro, et al, 45% of carcinomas arising in pleomorphic adenomas within 3 years of presentation. [8] In conclusion, we report huge pleomorphic adenoma of 20 cm × 32 cm × 14 cm in dimensions and weighing 3.7 kg, which is the biggest pleomorphic adenoma treated in our part of world. If pleomorphic adenomas are untreated they can increase gradually up to numerous kilograms in weight. Some of these long standing tumors have tendency for malignant changes. Therefore, early identification and treatment of pleomorphic adenoma is recommended.

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