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Case Report

Oncocytoma of parotid gland: a rare case report

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ABSTRACT

Oncocytoma of parotid gland is a rare tumor that mainly affects the age groups of sixth to eight decades. The treatment of this tumor is mainly surgical with either radical or superficial parotidectomy and the prognosis is excellent. In our case report, 72 years old female came with complain of slowly growing, painless swelling on right infra auricular area which was diagnosed as oncocytoma of parotid gland. She was successfully treated with superficial parotidectomy. Since the oncocytoma of parotid gland is very rare tumor and may confuse with other parotid diseases like pleomorphic adenoma, mucoepidermoid carcinoma. As the cure rate of the disease is excellent, so it is advised to make the appropriate diagnosis whenever the case is encountered.

Keywords: Oncocytoma, Parotid gland, Superficial parotidectomy

INTRODUCTION

Oncocytoma of parotid gland is a rare tumor that mainly affects the age groups of sixth to eight decades. They composed exclusively of oncocytes with no myoepithelial or basal cell in between.[1,2] They can mislead in diagnosis of other salivary gland tumours which show prominent oncocytic change. Histologically they are classified as per new WHO (World health organization) classification in three types namely oncocytosis, Oncocytoma and oncocytic carcinoma.[3]

We here report a case of right sided oncocytic tumor of female without any significant past history.

CASE PRESENTATION

72 years old female, came with complain of slowly growing, painless swelling on right infra auricular area for 2 years. On examination, the swelling was non tender and firm in consistency with 4×4 cm in size and freely mobile as shown in Figure 1. The cervical lymph nodes were not palpable. All the laboratory investigations were normal. Contrast enhanced CT scan of neck showed homogenously enhanced mass measuring 3.93×3.83×3.16 cm occupying superficial lobe of thyroid gland as shown in Figure 2.

Figure 1: showing infra auricular swelling at right side.

Figure 2: Showing CECT of neck with contrast enhanced mass at right parotid region.

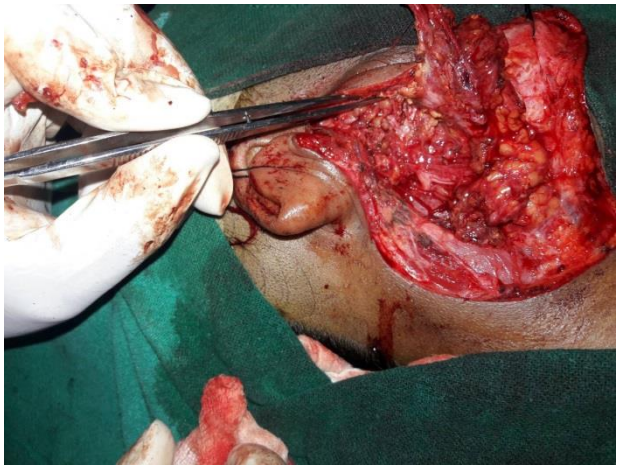

Figure 3: Showing the parotid tissue after superficial parotidectomy right side.

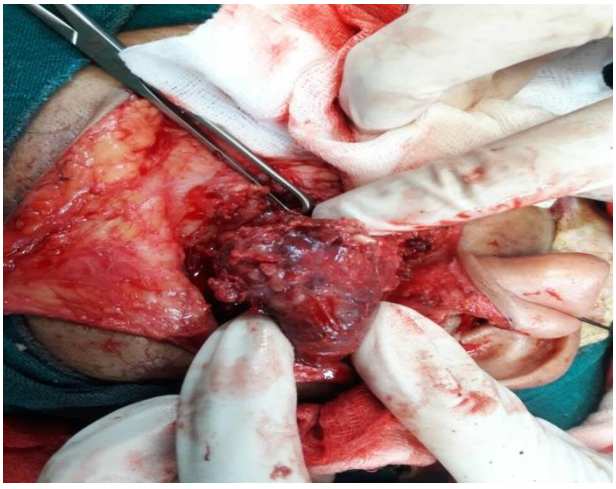

Figure 4: Showing gross appearance of mass after removal.

Patient underwent superficial parotidectomy as shown in Figure 3. The gross appearance of mass was 4×3×2 cms as shown in Figure 4. The histopathology showed oncocytes with round nucleus, micro-granular and eosinophilic cytoplasm with fibrous layer as shown in Figure 5.

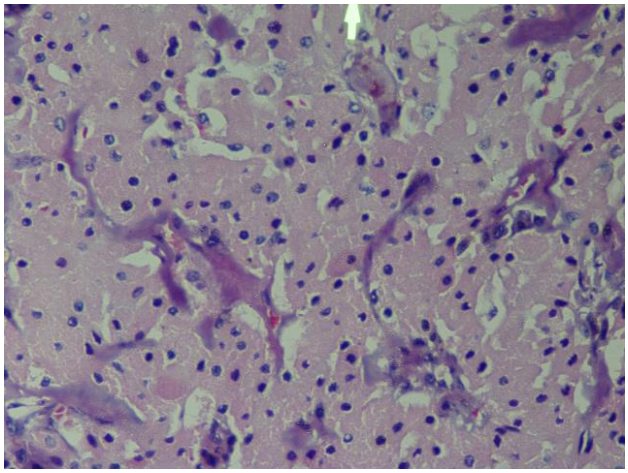

Figure 5: Showing microscopic appearance of the oncocytic mass.

DISCUSSION

Oncocytomas usally occur in elderly with 6th to 8th decade and slightly female preponderance.They are also called as mitochondriomas or oxyphilic adenomas.

In 80% of cases they affect parotid gland and 7% cases are bilateral.[4,5] Oncocytic change is seen in other organs like thyroid gland, parathyroid gland, adrenal gland, kidney and pancreas. There may be the radiation exposure history in about 20% cases.[6]

Pathologically, oncocytoma is a well circumscribed mass with layers of oncocytes composing of round nucleus, micro-granular and eosinophilic cytoplasm. Though the FNAC is a generally used for the diagnosis but its sensitivity is only 29%.[4] However in recent literature, CT findings were correlated with histopathological reports.[7]

Regarding the pathogenesis, there are many speculations but neither of them is clear. Some mentioned about age related changes, others mentioned about neoplastic growth, whereas hyperplastic/metaplastic phenomena is also speculated. There is also theory regarding mitochondrial alteration but this speculation is also not clear as few tumors harbor mitochondrial DNA.[8]

There are many differential diagnosis of disease eg; pleomorphic adenoma, basal cell adenoma, clear cell carcinoma, mucoepidermoid carcinoma, acinic cell carcinoma, oncocytic carcinoma and metastatic renal cell carcinoma.[4,6,9,10] All these tumors can be differentiated with their microscopic pictures and features.

The treatment of this tumor is mainly surgical with either radical or superficial parotidectomy.[4] The prognosis is

excellent. Local recurrence is less than 20% and mainly because of incomplete removal.[11]

CONCLUSION

Since the oncocytoma of parotid gland is very rare tumor and may confuse with other parotid diseases like pleomorphic adenoma, mucoepidermoid carcinoma. As the cure rate of the disease is excellent, so it is advised to make the appropriate diagnosis whenever the case is encountered.

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