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Primary Liposarcoma of Parotid Gland:a Rare Presentation and Review of Literature

KEYWORDS: parotid gland, liposarcoma, FNAC, Superficial parotidectomy

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ABSTRACT *Primary liposarcoma of the salivary gland is a very rare tumour with only about 11 reported cases of primary liposarcoma of major salivary glands in literature so far. Clinically this is a tumour of adulthood, mean age is 6th decade with a slight male preponderance.Liposarcomas of the parotid gland have a better prognosis over other soft tissue locations. Complete local excision without adjuvant therapy is the best option. We present a case of solitary swelling of size 4 cm on the left side of the face over the angle of the mandible and below the ear lobule of one year duration and was clinically diagnosed as parotid gland tumour arising from the superficial lobe. Work up was done with routine investigations and FNAC. FNAC suggestive of benign lesion of parotid gland. Superficial parotidectomy was done and histopathological examination revealed liposarcoma of the parotid gland.*

Introduction: parotid gland is the most common site for salivary tumours. Most tumours arise in the superficial lobe and present as slow growing, painless swelling below or infront of the ear. 80- 90% of the parotid tumours are benign and remaining are malignant. The common malignant salivary gland tumours are acinic cell carcinoma, adenoid cystic carcinoma, mucoepidermoid carcinoma, adenocarcinoma, squamous cell carcinoma and carcinoma arising in pleomorphic adenoma, but primary liposarcoma of the salivary gland is a very rare malignant neoplasm with only about 11 reported cases of primary liposarcoma of the major salivary glands in literature so far. Clinically this is a tumour of adulthood; mean age is 6th decade with a slight male preponderance. Liposarcomas of the parotid gland have a better prognosis over other soft tissue locations. Complete local excision /superficial parotidectomy without adjuvant therapy is the best modality of treatment.

Case Report:

A 55 year gentleman presented with a solitary swelling of size 4cm on the left side of the face over the angle of the mandible and below the ear lobule present for the past one year. The swelling was painless and gradually increased in size, neither adherent to the skin nor to the masseter muscle. The tumour was firm in consistency. No involvement of the facial nerve, movements of the jaw not restricted. Cervical lymph nodes are not enlarged. The tumour was arising from the superficial lobe of the parotid gland and clinically diagnosed as benign tumour of the parotid gland.FNAC suggested benign lesion of the parotid gland. Superficial parotidectomy was done and histopathological examination revealed large sheets of spindle shaped cells arranged in short fascicles, sheets of round to oval cells with vesicular nucleus and prominent nucleoli, mononuclear and multinuclear giant cells interspersed with focal areas of lipoblastic differentiation and necrosis. Specimen also showed increased vascularity with chicken wire pattern. Immunohistochemistry of the specimen was strongly positive for vimentin and negative for cytokeratin.-Sarcoma with lipoblastic differentiation.

Histopathological Examination

Figure: I

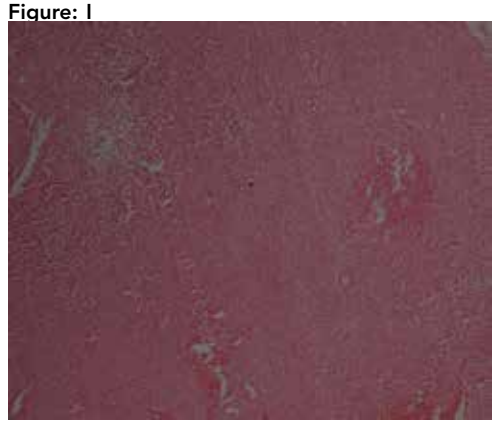

Figure: 2

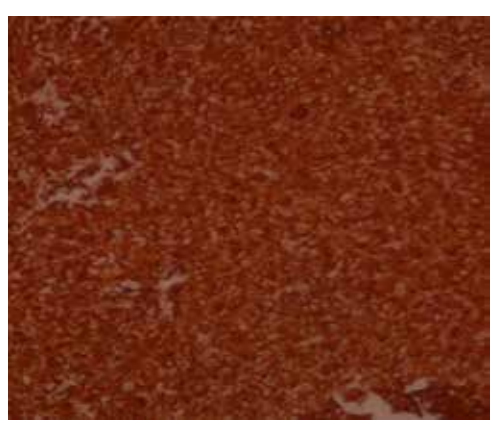

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Figure: 3

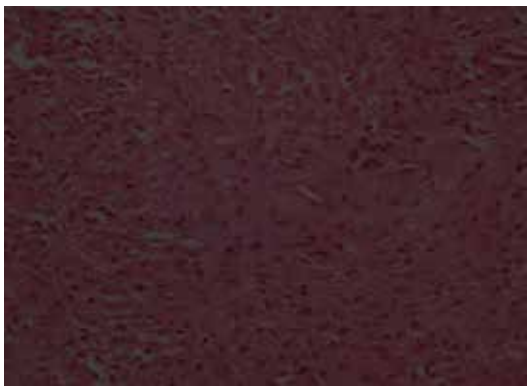


Figure: 4

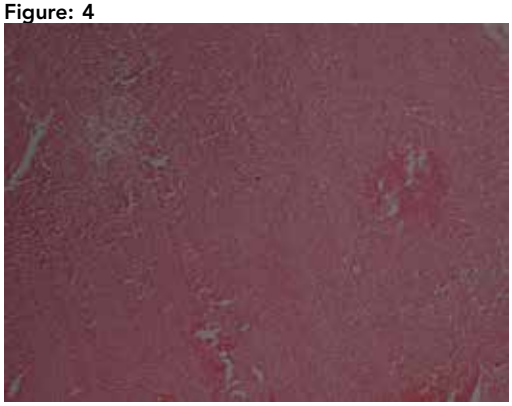
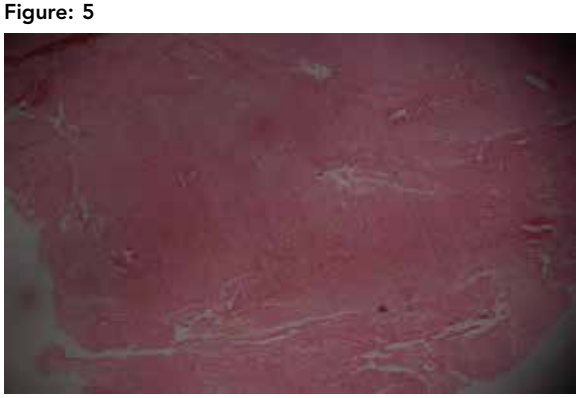


Figure: 5



Discussion:

Liposarcoma is one of the most common tumours in the adult arising mainly in the trunk and extremities but very rarely seen in parotid gland. Approximately only 11 cases of primary salivary gland liposarcomas are reported in literature so far. Salivary gland liposarcomas are common in the 6th decade with a male predeliction and our case corroborates with this finding.

Liposarcoma elsewhere in the body is an aggressive tumour with a poor prognosis, but have a subdued clinical course in the salivary gland with minimal recurrence rate. Recurrence depends on the size of the tumour at initial presentation. Tumours less than 5cm in largest dimension have a favorable prognosis.

Our patient presented with a swelling of size 4cm with no secondaries in neck and no distant metastases. There was no involvement of the skin over the swelling and no infiltration of the terminal branches of the facial nerve and no involvement of the temporomanibular joint suggesting a favourable prognosis post surgery.

Treatment involves complete excision of the tumour - Superficial parotidectomy without any adjuvant therapy with regular and careful follow-up thereafter.

Conclusion:

Isolated liposarcoma of the parotid gland is a very rare tumour with a favourable prognosis following total surgical excision. Adjuvant therapy is not indicated.

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