CASE REPORT

A CASE REPORT ON PLEOMORPHIC ADENOMA OF SUBMANDIBULAR GLAND

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ABSTRACT: Pleomorphic adenoma of submandibular gland is a very rare condition compared to that of parotid. We are here discussing a case of the same in a 40yrs old male with clinical, operative, and histological findings .

KEY WORDS:-Pleomorphic adenoma, Submandibular gland

CASE REPORT: A 40 year old male presented to our out-patient department with a painless huge swelling on right side of neck since 15 years. The lump was extending from right lower cheek to just above clavicle and from midline to angle of mandible. It was about 10 cm in length and 7 cm in breadth. The lump was of lemon size to begin with and has slowly grown to present dimensions. Size of the lump has no relation with chewing. On examination, the lump had variegated consistency and was not fixed either to skin or deeper structures. There was no regional lymphadenopathy. Head and neck examination otherwise was normal and so was general examination.

Fine needle aspiration cytological examination of swelling showed it to be pleomorphic adenoma of submandibular gland. A suprahyoid neck dissection was done under general anaesthesia with preservation of marginal mandibular, lingual and hypoglossal nerves. No cervical lymphadenopathy was detected during dissection as well.

Histopathological examination of the biopsy specimen showed salivary gland tissue with well encapsulated lesion composed of admixture of epithelial and stromal elements. There was stromal predominance with mainly fibroblast. The epithelial cells were arranged in tubular and trabecular patterns with prominent myoepithelial components, these were embedded in dense fibrous stroma which also showed chondromyxoid areas resembling cartilage. No atypia was reported. Histology was consistent with pleomorphic adenoma.

DISCUSSION: Benign mixed tumour (pleomorphic adenoma) is the most common neoplasm of salivary gland. It is most frequent in women in 4th decade of life, but it can be seen in children and elderly of either sex. It is ten times more common in parotid than in submaxillary gland.

Grossly the tumour forms a rubbery, resilient mass with a bosselated surface and may grow to large size. The consistency depends on relative amount of epithelial cells and stroma and type of latter.

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Microscopically, typical mixed tumour has biphasic appearance resulting from intimate admixture of epithelium and stroma. Most of the epithelial component is of glandular nature. Stroma may have non-specific fibromyxoid appearance, however areas of clear cut cartilaginous differentiation are usually found. Benign mixed tumour is frequently misdiagnosed as carcinoma by the novice in pathology due to its extreme cellularity, scattered bizarre tumour cells, partial penetration of capsule and occasional occurrence of clusters of tumour cells in vascular lamina.³

Clinically tumours of submandibular gland are uncommon and usually present as slow growing, painless swelling. Only 50 % of submandibular swellings are benign. In many cases swelling cannot on clinical examination be differentiated from submandibular lymphadenopathy.³

FNAC and core needle biopsy are helpful. FNAC in experienced hands can determine whether the tumour is malignant with sensitivity of around 90 %. FNAC can also distinguish primary salivary gland tumour from metastatic disease.¹

Ultrasound can determine and characterise superficial parotid tumour. It is also frequently used to guide FNA.¹

CT allows direct, bilateral visualisation and provides information about overall dimensions and tissue invasions.⁴

MRI provides superior soft tissue delineation such as perineural invasion.⁴

The proper treatment for pleomorphic adenoma is its total surgical removal, along with margin of normal salivary tissue that surrounds it. For tumour located in superficial lobe of parotid, which represents the majority, standard surgery is superficial parotidectomy. For small pleomorphic adenoma in submandibular gland, total submandibular gland excision is appropriate but for tumours that are large and project beyond the submandibular gland is best served by suprahyoid neck dissection preserving the marginal mandibular branch, lingual nerve and hypoglossal nerve. In cases of overt malignancy, modified neck dissection is appropriate and may necessitate sacrifice of lingual and hypoglossal nerves.³

The recurrence rate of benign mixed tumour depends almost entirely on adequacy of primary excision. Recurrence is very high if tumour is simply enucleated because small inconspicuous nodules attached by threadlike filaments of neoplastic tissue may be present surrounding the main mass. They may have the shape and appearance of lymph node and may be mistaken by surgeon and pathologist for nodal metastasis. If the tumour is enucleated these small remnants will be left behind and provide nidus for recurrence. Most of these recurrences occur during first 18 months after surgery but others supervene over very long period, 50 years or more and so long term follow up is essential.³

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