INFLAMMATORY PSEUDOTUMOR OF PAROTID GLAND – A CASE REPORT.

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ABSTRACT: An inflammatory pseudotumor is a rare clinical condition of unknown etiology and benign course, mimicking sometimes other malignant entities under the clinic and pathologic viewpoint³. Inflammatory pseudotumor” is a broad descriptive term used to describe a localized collection of inflammatory and fibroblastic cells ⁴, ⁸. It is an uncommon lesion that can present clinically like a tumor⁹. Due to presence of abundant polyclonal plasma cells, its etiology (post inflammatory vs immunologic) is still being debated⁶. We report a case of inflammatory pseudotumor of the parotid in a 61 year old man.

KEYWORDS: parotid gland, inflammatory pseudotumor.

INTRODUCTION: An inflammatory pseudotumor can be defined as a localized mass made up of a fibrous stroma and chronic inflammatory infiltrates with a predominance of plasma cells or histiocytes and an absence of anaplasia and mitotic figures⁷,⁹. These lesions can be categorized as one of three histopathologic subtypes: (1) those that have a prominent histiocytic component (xanthogranuloma subtype), (2) those that have a prominent plasma cell component (plasma cell granuloma subtype), and (3) those that have marked sclerosing features (hyalinized sclerosing subtype)¹¹,¹⁵.

These uncommon lesions usually occur in the lung parenchyma; other reported sites include the liver, kidney, thyroid, adrenal glands and choroid plexus of the brain¹³. An inflammatory pseudotumor of the parotid is rare⁶. In this article, we describe a case of inflammatory pseudotumor of parotid and review the histologic and clinical characteristics of this lesion⁸.

CASE REPORT: 61 year old man presented with complaints of left sided pre auricular swelling of one year duration. The swelling was gradually increasing in size. It was not associated with pain or difficulty in mouth opening. There was no history of facial weakness or previous history of irradiation. On examination 4x5cm ovoid swelling was seen in the left parotid region, which was non tender and firm in consistency. Swelling had a smooth surface. There was no associated lymphadenopathy. Facial nerve functions were normal. Ear, nose, throat examination were within normal limits.

Fine Needle Aspiration of the swelling was reported as pleomorphic adenoma. However excisional biopsy was advised for confirmation. CT scan of neck plain and contrast showed a well defined homogenous mass in the left parotid gland (fig.1). Patient was investigated and taken up for surgery. Under G.A left total parotidectomy with facial nerve conservation was done (fig. 2). Specimen was sent for histopathological analysis which showed a well circumscribed lesion made up of dense lymphoid & plasma cells in background of scattered spindle cells. Reported as inflammatory pseudotumor of the parotid gland (fig. 3).

DISCUSSION: Inflammatory pseudotumor is a rare tumor like pseudo neoplastic lesion⁵. It has been postulated that they might be the result of a post inflammatory repair process, a metabolic
disturbance, or an antigen-antibody interaction with an agent that was no longer identifiable in aspiration or biopsy material. It occurs more commonly in the lungs, other sites of involvement are liver, kidney, thyroid, adrenal, bladder, skin, spleen and lymph nodes. Inflammatory pseudotumor of the parotid is a very rare condition. It is equally distributed in males and females. The peak age incidence is in the 7th decade. The clinical feature depends on the structures involved and the rate of growth.

Morphological appearance in parotid is that of a well circumscribed mass. Cut surface is grey white in color and shows a whorled appearance. Microscopically the tumor shows spindle cells admixed with variable amount of plasma cells, lymphocytes, foamy cells, and polymorphs. Spindle cells show vague fascicles or storiform structures. The plasma cells contain Russell bodies. No mitotic figures were found suggesting the benign nature of the disease. Laboratory findings may be normal or may show elevated erythrocyte sedimentation rate, and C-reactive protein levels and sometimes a high white blood cell count. There is no suggestive literature regarding the presence of positive tumor markers (e.g. alpha fetoproteins, carcinoembryonic antigens) in these lesions. Immunoperoxidase tissue section staining has confirmed the polyclonal nature of the plasma cells, which are primarily positive for immunoglobulins G and A. Neither bacteria nor fungi have been shown to grow in tissue cultures. Calcifications are seldom present in an inflammatory pseudotumor, when they are present they represent a similar but distinct pathologic entity called calcifying fibrous pseudotumor. These pseudotumors usually originate in the soft tissues of the extremities, and they exhibit extensive concentric psammomatous or dystrophic calcifications.

CONCLUSION: Inflammatory pseudotumor of parotid is a rare entity and can clinically mimic any malignant growth. Clinical scenario and CT scan findings are usually non specific so other diseases including inflammatory or malignant processes should be ruled out. FNAC may not be conclusive, thus a biopsy is necessary to confirm the diagnosis. When a patient has a very slow growing lesion, the possibility of an inflammatory pseudotumor should be considered.
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