Castleman's Disease In Parotid Region: A Rare Case From Chhattisgarh

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Abstracts: A thirty five year old patient presented with swelling in parotid region. After surgical removal and histopathological examination unicentric lymphoproliferation was observed. Further, immunohistochemical studies of CD 21 tissue marker confirmed Castleman's Disease. The disease most commonly involves the mediastinum and neck but the involvement of the parotid gland region is very rare, being reported first time from Chhattisgarh State [Singh BR NJIRM 2014; 5(4) :122-123]

Key Words: Castleman' Disease, parotid swelling, CD 21

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Introduction: : Dr. Benjamin Castleman's in 1956 described benign lymphoproliferative solitary lesion under the title of "localized mediatstinal lymph node hyperplasia resembling thymoma" in mediastinal region1. Castleman's disease can present as a localized mass or a more aggressive multicentric form2. The disease generally involves the mediastinum, head, neck area and abdomen3. Retroperitoneal cavity being second common site. They also occur in other areas of the body along the lymphatic chain4, usually where lymph nodes are normally found, but the involvement of the parotid gland region is very rare.

Case Report: A thirty five years old female presented in private clinic with a painless swelling in the right parotid region for duration of one year. The swelling was gradually increasing in size. Clinical examination revealed round, firm, smooth, non-tender swelling in the Rt. Infra-auricular region. CT Scan showed a smooth well-defined mass about 4.25 ×3.75 cm and homogeneous soft tissue density.

Fine needle aspiration of swelling showed papillary cystadenoma of Salivary gland. As all other laboratory examination were within normal limits, the patient was subjected for superficial Parotidectomy. Intraoperatively a 6 ×4 × 4 cm. round mass was located over the Parotid gland. The tumour was round & well encapsulated & the specimen was sent for histopathological examination after surgical removal. We were surprised when HPE revealed findings suggestive of Castleman's disease which was confirmed on immunohistochemistry for CD 21. Macroscopic examination showed a well defined homogenous grayish brown mass surrounded by a thin rim of normal salivary gland tissue. Microscopic findings show lymph node revealing prominent centers of lymphoid follicles, showing follicular dendritic cells with focal hyalinization and are surrounded by small lymphocytes.

Discussion: Although Castleman's Diseaese seen in all ages affecting both sexes more predilection seen in the age group 15 to 35 years[1, 5]. Amongst many hypothesis for etiology, chronic antigenic stimulation by a virus or chronic inflammation leading to lymphoproliferation tops the list, while other causes include hamartomatous process, immunodeffciency state and autoimmune disorder[4]. Based on clinical & radiological findings. Castleman's disease can be classified as a unicentric & multicentic. Histopathologically they can be divided as Hyaline vascular type (80% to 90% cases) & plasma cell and mixed cellularity(10-20%) associated with systemic signs, symptoms & other diseases[6].

Most lesions (86%) are found in the mediastinum & only 6% is located in the neck. Within the head & neck region. Castleman's disease most commonly present as a solitary mass under the Sternocleidomastoid muscle or arise as an Extension of a mediastinal mass[1]. In the parotid probably arises from the paraglandular lymph nodes related in the parotid capsule or intraglandular lymph nodes within the gland parenchyma. In the present case lesion was localized over the superficial lobe, indicating that the disease process was taking place in the paraglandular lymph node.

Castleman's disease of parotid region is a diagnostic challenge. This diagnostic problem can be attributed to a paucity of signs and symptoms and the ability of Castleman's disease to mimic other neoplasms. The definitive diagnosis is only made by histological examination and diagnostic imaging, such as CT scanning, MRI imaging.

Figure 1: Post Op Photograph After 2 Year Of Follow Up

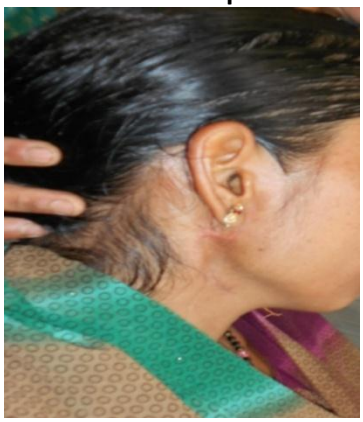


Figure 2: A CT Scan Showing Tumour

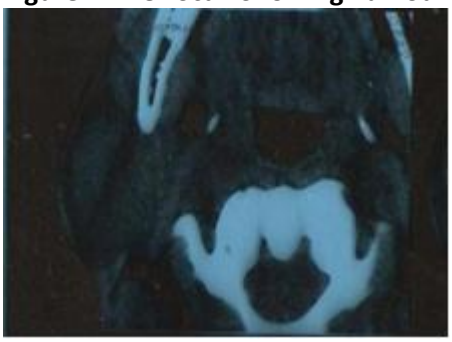
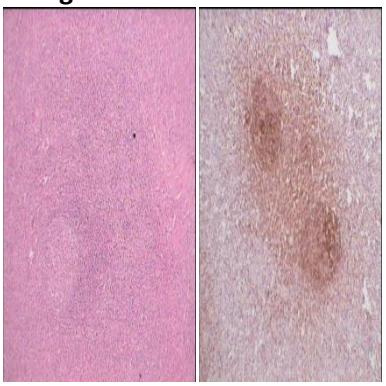


Figure 3: HP Examination



Surgery is the treatment of choice for the solitary form, whereas chemotherapy radiotherapy and steroids are proposed for the multicentric type and inoperable cases. In our case there was no recurrence even after 2 year of follow up.

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