Oncocytic Papillary Cystadenoma of Parotid Gland

Cystadenoma or papillary cystadenoma of the salivary gland was first subclassified into various types of monomorphic adenomas in the first edition of the World Health Organization's histological classification of salivary gland tumors. However, it was listed as a distinct histopathologic entity in the second edition.[1,2] This lesion is extremely rare in major salivary glands.[3] An exhaustive literature review could only reveal six cases of Oncocytic Papillary Cystadenoma (OPC) in parotid gland.[3-5]

An otherwise healthy, 54-year male presented with a chief complain of swelling with mild pain on his right parotid gland for the last three months. Past medical history was non-contributory to the present swelling. Physical examination revealed a 3.5 cm mass on the parotid region, the overlying skin of the swelling was slightly reddish in color. On palpation, it was found to be soft to firm. Computed Tomography (CT) scan revealed a cystic mass with enlargement of the right parotid gland (Figure 1a). Partial parotidectomy of right parotid gland was performed under anesthesia and the tissue was sent for the histopathological examination. The macroscopic examination exhibited a well defined unilocular cystic mass of 3 cm filled with mucin like material (Figure 1b). Histological examination revealed a multilocular cystic tumor with numerous papillary projections (Figure 1c). These papillary projections were lined by oncocytic cells (Figure 1d). The connective tissue capsule was minimal. A crystalloid-like material was also seen in the cystic lumen (Figure 1e). Based on histological features, a final diagnosis of OPC was rendered.

OPCs are rare neoplasms usually occur in minor salivary glands, account for 0.9 - 2% of all minor salivary gland tumors, but it is extremely rare in parotid gland.[3,4] These neoplasms are usually asymptomatic and present as a slow growing cystic mass.[5] Cystadenoma can be subdivided into mucinous and papillary types.[1] The latter has well-defined unilocular or multilocular cysts, with intraluminal papillary projections.[4] Oncocytic differentiation occurs rare and can be extensive.[2] Histologically, OPC may be confused with Warthin's tumor, intraductal papilloma, and oncocytoma. Because of varied features in cytology, histopathology is mandatory to arrive at the final diagnosis.

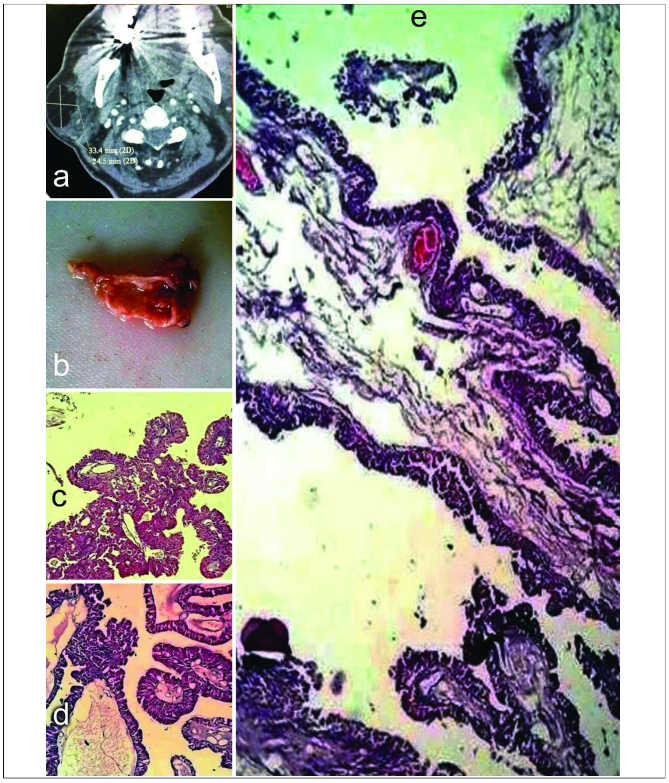

Figure 1: (a) computed tomographic scan shows a cystic lesion. **(b)** Gross tissue. **(c)** Multilocular cystic arrangement with numerous papillary projections. (Hematoxylin and Eosin X 10). **(d)** Papillary projections lined by oncocytes. (Hematoxylin and Eosin X 40). **(e)** Crystalloid material in lumen (Black arrow) (Hematoxylin and Eosin X 40).

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