Sir,
Parotid gland is one of major salivary glands which is involved by number of benign and malignant diseases. Epidermoid cysts and lymphoepithelial cysts are a few examples of cysts involving the parotid gland. Among the oncocytic lesions, Warthin’s tumour and oncocytomas are seen in the parotid. The oncocytic cysts in salivary glands are least reported in the literature, which is not an uncommon diagnosis in the larynx and nasopharynx.

A 78-year-old man was referred with a long history of a lump in right parotid region involving the lower pole of the right parotid gland. The clinical impression was that of a benign process with differential diagnosis including pleomorphic adenoma and Warthin’s tumour. A nerve sparing partial parotidectomy was carried out and specimen was sent in formalin to histopathology department for assessment.

A soft tissue mass measuring 5 x 4.5 x 2 cm was serially sliced to show a unilocular cyst filled with brownish fluid. The cyst measured 1.5 cm in diameter. The inner surface of the cyst were smooth and glistening without any projections or solid areas. The cyst was surrounded by relatively firm tissue, which appeared a salivary gland. The entire cyst with adjacent tissue was submitted for histology.

The histological examination showed a seromucinous glandular tissue consistent with parotid gland containing a cyst, which was lined by columnar to cuboidal oncocytic epithelial cells, mostly arranged in double layer and focally multilayered (Figure 1). Their cytoplasm exhibited abundant strong eosinophilic granularity. No papillary infoldings or lymphoid tissue was seen. The adjacent salivary gland parenchyma was partly compressed adjacent to the cyst but otherwise it was unremarkable. The parotid gland away from the cyst showed a reactive lymph node. The final diagnosis was an excised oncocytic cyst.

The lesions containing oncocytic cells in a salivary gland include oncocytomas, Warthin’s tumour, oncocytic adenocarcinoma and mucoepidermoid carcinomas. Among the cystic lesions, epidermoid cysts, mucus retention cysts, lymphoepithelial cysts, cystadenomas, Warthin’s tumours, cystic pleomorphic adenomas, low-grade mucoepidermoid carcinomas, cystadenocarcinomas, and polycystic disease of the parotid gland are included. Only one case of a multiple oncocytic cysts in the parotid gland is reported in the literature.

Oncocytic cysts are well-described in the literature in the context of upper aerodigestive tract. Oncocytic cystic lesions in the larynx comprise an uncommon but pathologically well-defined group; more than 150 cases are reported worldwide. The laryngeal cysts tend to be in the region of ventricles and occur in an older age group. Hoarseness is the most common clinical manifestation, with lesions appearing as polypoid masses. Their pathogenesis is considered to be the result of oncocytic metaplasia, apparently related to aging of cells in the seromucinous gland and ducts. The cystic dilatation is probably due to an obstructive phenomenon. The association of laryngeal oncocytic cysts with the familial Warthin’s tumour in parotid gland is reported previously.

The lesions composed of oncocytic cells but without hyperplastic lymphoid tissue ranged from oncocytic metaplasia, and hyperplasia to benign and malignant neoplasms, including oncocytomas and oncocytic carcinomas.

The significance of the diagnosis of oncocytic cyst is paramount particularly in the cytology aspirates. Having cystic debris with oncocytic cells puts benign oncocytic cysts in the differential diagnosis’ list which otherwise includes only Warthin’s tumour and oncocytoma.

Figure 1: Oncocytic cyst lining with normal salivary gland to the right (H and E stain).

REFERENCES


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DR. MUHAMMAD BABAR ASLAM

Correspondence:
01, Gifford Way, Darwen, Lancashire
United Kingdom
E-MAIL: mbaslam@yahoo.com