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Editorial

Accretion and Conduit-Ductal Papilloma Salivary Gland

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Ductal papilloma of salivary gland is an exceptionally discerned, benign neoplasm which commonly arises within minor salivary glands. Tumefaction is further categorized into intra-ductal papilloma and inverted ductal papilloma. Neoplasm demonstrates papillary excrescences layered with proliferating, benign appearing, bland cuboidal or columnar epithelial cells impregnated with a distinct fibro-vascular core. Focal inflammation may ensue. Commonly discerned within the adult population, neoplasm appears to lack a specific gender predilection [1,2].

Ductal papilloma commonly implicates minor salivary glands and is exceptionally discerned within parotid or sublingual glands. Ductal papilloma is posited to arise from proximal excretory ducts of the salivary gland. Additionally, neoplasm is postulated to be of luminal ductal origin [1,2]. Neoplasm represents with painless submucosal lesions. Frequently, lesions are amalgamated within the oral cavity. Besides, clinical symptoms as tumour mass or discomfort with mastication may ensue [2,3]. Cytological examination depicts compact clusters and papillary articulations composed of monomorphic columnar ductal epithelial cells impregnated with abundant cytoplasm with fine vacuoles, basal, ovoid nuclei and inconspicuous nucleoli. A distinct component of squamous epithelial cells is absent [2,3]. Upon microscopy, intraductal papilloma preponderantly appears to be situated upon excretory ducts of minor salivary glands. Generally uni-cystic, tumefaction is layered by papillary epithelial excrescences wherein bland cuboidal to columnar epithelial cells appear to proliferate and are impregnated with a distinct fibro-vascular core. Exceptionally, mucinous cells may be intermingled with the neoplasm. Cytological atypia is absent. Mitotic figures are exceptional [2,3]. Inverted ductal papilloma emerges as a non encapsulated lesion which demonstrates a centric aperture communicating with superimposed mucosal surface. Neoplasm is constituted of complex proliferation of non keratinizing squamous epithelium demonstrating an endophytic growth pattern. Morphologically, neoplasm recapitulates inverted papilloma of nasal cavity. Tumour parenchyma may delineate commingling of goblet cells and columnar epithelial cells. Cytological atypia is absent. Mitotic figures are infrequent [3,4].

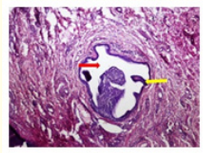

Figure 1: Intraductal papilloma demonstrating papillary excrescences layered by bland columnar epithelial cells and a distinct fibrovascular core. Surrounding stroma is fibrotic. Cytological atypia is absent [8].

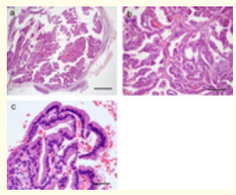

Figure 2: Intraductal papilloma delineating distinct papillary projections layered by bland columnar epithelial cells and a distinct fibro vacsular core encompassed within a fibrotic stroma. Cytological atypia is absent [9].

TNM staging of malignant salivary gland tumours is designated as [3,4].

Primary Tumour

•TX: Primary tumour cannot be assessed •T0: No evidence of primary tumour •Tis: Carcinoma in situ •T1: Tumour is miniature, non invasive and ≤2 centimetre in greatest dimension •T2: Tumour is enlarged, non invasive and between 2 centimetres to 4 centimetres in greatest dimension •T3: Tumour is >4 centimetres and <6 centimetres in greatest dimension, enlarged and invades adjacent anatomical structures with sparing of 7th cranial nerve or facial nerve •T4a: Tumour of any magnitude which infiltrates adjoining cutaneous surface, maxilla or mandible, external auditory canal or facial nerve •T4b: Tumour infiltrates base of skull, adjacent bones and encases carotid artery or neighbouring arteries.

Regional lymph nodes

•NX: Regional lymph nodes cannot be assessed •N0: Regional lymph node metastasis absent •N1: Regional lymph node metastasis present into singular ipsilateral lymph node as the primary tumour wherein magnitude of incriminated lymph node is ≤3 centimetres •N2: is comprised of ~N2a: Regional lymph node metastasis into singular ipsilateral lymph node as the primary tumour wherein magnitude of incriminated lymph node is ≤3 centimetres and tumour extends beyond the lymph node •N2b: Regional lymph node metastasis into > singular ipsilateral lymph node as the primary tumour wherein magnitude of incriminated lymph node is ≤ 6 centimetres and tumour invasion beyond the lymph node is absent •N2c: Regional lymph node metastasis into >singular ipsilateral or contralateral lymph node with magnitude of incriminated lymph node ≤ 6 centimetres and tumour invasion beyond lymph node is absent •N3 is categorized as ~N3a:Regional lymph node metastasis > 6 centimetre in greatest dimension with absent tumour invasion beyond lymph node ~N3b: Regional lymph node metastasis into singular, ipsilateral lymph node >3 centimetre in greatest dimension with tumour invasion beyond the lymph node OR regional lymph node metastasis into> singular, ipsilateral, contralateral or bilateral lymph node as the primary tumour ≤3 centimetre in greatest dimension with tumour invasion beyond the lymph node OR regional lymph node metastasis into singular, contralateral lymph node ≤3 centimetre magnitude with tumour extension beyond the lymph node

Distant Metastasis

•MX: Distant metastasis cannot be assessed •M0: Distant metastasis absent •M1: Distant metastasis present into sites as pulmonary parenchyma

Ductal papilloma of salivary gland appears immune reactive to CK7, CK18, epithelial membrane antigen (EMA) or vimentin. Variable immune reactivity to S100 protein, carcinoembryonic antigen (CEA) and gross cystic disease fluid protein 15 (GCDFP15) is encountered. Mucous cells may be highlighted with Alcian blue and Periodic acid Schiff's (PAS+) stain [5,6]. Tumour cells appear immune non reactive to HER2, smooth muscle actin (SMA), CK14 or glial fibrillary acidic protein (GFAP) [5,6]. Ductal papilloma of salivary gland requires segregation from neoplasms as acinic cell carcinoma papillary cystic variant, distant metastasis from papillary thyroid carcinoma, papillary cystadenocarcinoma, papillary cystadenoma, polymorphous low grade adenocarcinoma, salivary duct carcinoma or sialadenoma papilliferum [6,7]. Ductal papilloma of salivary gland may be appropriately subjected to surgical extermination of the neoplasm. Tumefaction appears devoid of reoccurrence [6,7].

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8. Image 1 Courtesy: Wiley online library.
9. Image 2 Courtesy: Science direct.