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Editorial

Receptive and Dissembled-Lymphoepithelioma-Like Carcinoma Cutis

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Lymphoepithelioma-like carcinoma is an exceptionally discerned, poorly differentiated carcinoma implicating cutaneous surfaces. Tumefaction is pervaded with prominent inflammatory infiltrate of reactive lymphocytic cells.

Neoplasm appears to simulate undifferentiated nasopharyngeal carcinoma wherein World Health Organization (WHO) categorizes the tumefaction confined to nasopharynx or sinonasal cavity as lympho-epithelial carcinoma. Notwithstanding, cutaneous lymphoepithelioma-like carcinoma appears non concurrent with Epstein Barr virus (EBV) infection.

Generally, neoplasm arises within older subjects or elderly adults. A specific gender predilection is absent [1,2].

Commonly, tumefaction is confined to head and neck region.

In contrast to neoplasms confined to salivary glands, gastric region, thymus, nasopharynx, sinonasal cavity or pulmonary parenchyma, cutaneous lesions appear non concordant with Epstein Barr virus infection [1,2].

Of obscure aetiology, neoplasm is posited to emerge as a poorly differentiated or undifferentiated squamous cell carcinoma or may represent as a poorly differentiated adnexal neoplasm [2,3].

Clinically, neoplasm represents as a plaque, papule or tumour nodule confined to facial region or the neck [2,3].

Grossly, tumefaction configures as a firm plaque, papule or tumour nodule of variable hue.

Upon microscopy, neoplasm articulates well circumscribed lobules, cohesive nests or miniature aggregates of tumour cells. Neoplastic cells appear enlarged or as epithelioid cells intensely intermingled with dense aggregates of T lymphocytes, B lymphocytes and plasma cellular infiltrate [3,4].

High power examination may appropriately delineate biphasic nature of the tumefaction. Tumour cells appear polygonal and permeated with eosinophilic cytoplasm, vesicular nuclei, prominent nucleoli and inadequately defined cellular perimeter. Mitotic activity is enhanced with the emergence of atypical mitotic figures [3,4].

Epithelioid cell component appears non contiguous with superimposed stratified squamous epithelial layer. Exceptionally, foci of ductular differentiation or trichilemmal keratinization may ensue [4,5].

Epithelial tumour cell aggregates are circumscribed by and commingled with an intense infiltrate of polymorphous and polytypic inflammatory cells. Aforesaid lymphoid and plasma-cellular inflammatory infiltrate may obscure the neoplastic epithelial component. Tumefaction delineating a preponderant component of inflammatory cells may simulate a lymphoproliferative disorder [4,5].

TNM staging of non melanocytic cutaneous carcinoma

Primary tumour

- TX: Primary tumour cannot be assessed.
- T0: No evidence of primary tumour.
- Tis: Carcinoma *in situ*.
- T1: Tumour ≤ 2 centimetres in greatest dimension with < 2 high risk features.
- T2: Tumour > 2 centimetres in greatest dimension along with or in the absence of singular additional high risk feature OR tumour of variable magnitude along with ≥ 2 high risk features.
- T3: Tumour demonstrating invasion of orbit, maxillary, mandibular or temporal bone.
- T4: Tumour delineates invasion of axial skeleton or appendicular skeleton or perineural invasion within nerves confined to base of skull.

Regional lymph nodes

- NX: Regional lymph nodes cannot be assessed.
- N0: Regional lymph node metastases absent.
- N1: Metastasis confined to singular ipsilateral lymph node ≤ 3 centimetres in greatest dimension.
- N2: Metastasis confined to singular ipsilateral lymph node >3 centimetres and ≤ 6 centimetres in greatest dimension OR within multiple ipsilateral lymph nodes ≤6 centimetres in greatest dimension OR within bilateral or contralateral lymph nodes ≤ 6 centimetres in greatest dimension.
- N2a: Metastasis confined to singular ipsilateral lymph node >3 centimetres and ≤ 6 centimetres in greatest dimension.
- N2b: Metastasis confined to multiple ipsilateral lymph nodes ≤6 centimetres in greatest dimension.
- N2c: Metastasis within bilateral or contralateral lymph nodes ≤ 6 centimetres in greatest dimension.
- N3: Metastasis confined to a lymph node >6 centimetres in greatest dimension.

Distant metastasis

- M0: Distant metastasis absent.
- M1: Distant metastasis present into soft tissue or various and specific sites [3,4].

Stages of non melanocytic cutaneous carcinoma

- Stage 0: Tis, N0, M0.
- Stage I: T1, N0, M0.
- Stage II: T2, N0, M0.
- Stage III: T3, N0, M0 or T1, T2, T3, N1, M0.
- Stage IV: T1, T2, T3, N2, M0 or any T, N3, M0 or T4, any N, M0 or any T, any N, M1 [3,4].

Lymphoepithelioma-like carcinoma appears immune reactive to pan-cytokeratin (CK) AE1/AE3, p63, epithelial membrane antigen (EMA) and variably immune reactive to CK5/6.

Characteristically, intraepithelial lymphocytes manifest as an admixture of B cells immune reactive to CD20 and T cells immune reactive to CD3 along with preservation of T cell antigens as CD2, CD5 and CD7.

Additionally, a population of polytypic plasma cells expressing kappa and lambda light chains may be encountered [5,6].

Tumour cells appear immune non reactive to melanoma markers as S100 protein or human melanoma black45 (HMB45) antigen, neuro-endocrine markers as chromogranin, synaptophysin or CD56 or Epstein Barr virus encoding regions (EBERs) as discerned by RNA *in situ* hybridization [5,6].

Lymphoepithelioma-like carcinoma requires segregation from neoplasms as cutaneous lymphadenoma, malignant lymphoma, malignant melanoma, Merkel cell carcinoma, poorly differentiated inflamed carcinoma or distant metastasis from nasopharyngeal carcinoma [5,6].

Lymphoepithelioma-like carcinoma may be appropriately eradicated by comprehensive surgical extermination of the neoplasm along with removal of wide perimeter of surrounding uninvolved tissue.

Alternatively, Moh's microsurgery may be optimally adopted to ensure comprehensive eradication of the neoplasm.

Radiation therapy is recommended for treating tumour reoccurrence or dissemination into regional lymph nodes [6,7].

In contrast to nasopharyngeal lymphoepithelioma-like carcinoma, neoplasm is associated with minimal reoccurrence and decimated potential for distant metastasis, especially when managed with complete surgical eradication of the neoplasm [6,7].

Tumour associated mortality or regional lymph node metastasis appears exceptional [6,7].

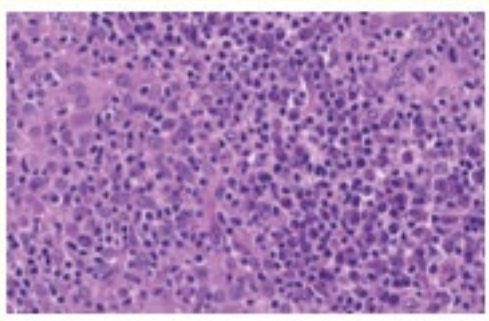

Figure 1: *Lymphoepithelioma-like carcinoma demonstrating a population of epithelioid cells impregnated with abundant, eosinophilic cytoplasm, vesicular nuclei and prominent nucleoli commingled with polymorphous and polytypic inflammatory cells as T lymphocytes, B lymphocytes and plasma-cellular exudate [8].*

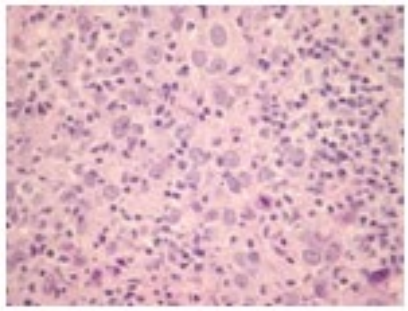

Figure 2: *Lymphoepithelioma-like carcinoma delineating aggregates o epithelioid cells impregnated with abundant, eosinophilic cytoplasm, vesicular nuclei and prominent nucleoli intermingled with polymorphous and polytypic inflammatory cells as T lymphocytes, B lymphocytes and plasma-cellular exudate [9].*

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8. Image 1 Courtesy: Science direct.com.

9. Image 2 Courtesy: Dermnet.com.

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