DERMATOPATHOLOGY

BENIGN MIMICS OF CUTANEOUS LYMPHOMA

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Benign mimics of cutaneous lymphoma represent a spectrum of diseases that bear a clinical and/or histopathologic resemblance to lymphoma. Pseudolymphoma (PSL) or cutaneous lymphoid hyperplasia (CLH) are terms used as synonyms of some of these conditions, especially in idiopathic cases.
Cutaneous PSLs can be broadly divided according to the cell type or distribution of the inflammatory cell infiltration into four groups: T-cell and CD30 T-cell PSL; B-cell and plasma cell-rich PSL; mixed T and B cell PSL and intravascular PSL
Cutaneous T-cell and CD30 T-cell pseudolymphomas:
Spongiotic dermatitis vs mycosis fungoides (MF): lymphomatoid contact dermatitis, Actinic reticuloid.
Drug-induced pseudolymphoma vs MF/Sézary syndrome (SS): with systemic symptoms (drug reaction with eosinophilia and systemic symptoms [DRESS]) or without systemic symptoms.
Lichenoid dermatitis vs MF: lichen sclerosus, lichen aureus/pigmented purpuric dermatosis, lymphomatoid keratosis.
Nodular pseudolymphoma: atypical lymphoid hyperplasia Vs small-medium CD4+ lymphoproliferative disorder, T-cell-rich angiomatoid polypoid pseudolymphoma (TRAPP).
HIV and other immunodeficiency-related CD8+ cutaneous pseudolymphoma.
Mimickers of primary cutaneous CD30+ lymphoproliferative disorders: pityriasis lichenoides et varioliformis acuta, viral infections, lymphomatoid drug reaction, nodular scabies.
Cutaneous B-cell and plasma cell rich-pseudolymphoma:
Borrelial lymphocytoma cutis.
Related with arthropod bites, vaccination or allergen extracts for hiposensitization, tattoos and piercing.
Drug induced B-cell pseudolymphoma.
Cutaneous plasmocytosis and lymphoplasmacytic plaque.
Cutaneous mixed T and B-cell pseudolymphoma:
Acral pseudolymphomatous angiokeratoma of children (APACHE).
Angiolymphoid hyperplasia with eosinophilia (ALHE).
Pseudolymphomatous folliculitis.
Cutaneous intravascular pseudolymphoma:
In relation with inflammatory skin diseases or trauma.
Clues for differential diagnosis: pseudolymphoma vs lymphoma
Clinical features: Patients with MF commonly present with patches and plaques on non-sun-

exposed skin areas. By contrast, actinic reticuloid is presenting with a persistent eczematous eruption affecting primarily the sun-exposed skin.
APACHE is characterized by multiple asymptomatic erythematous-violaceous papules and nodules, usually located unilaterally with acral distribution.
Solitary red to violaceous nodule on the earlobes, nipples or scrotum is the most common presentation for borrelial lymphocytoma cutis.
Ethnicity is relevant: cutaneous plasmocytosis is predominantly seen in Asians (Japanese).
Morphology: Dermal infiltrates with more than 25% of large lymphoid cells or microscopic aggregates of them (non-germinal center B-cells) are highly suspicious of lymphoma.
Phenotype: Loss of pan-T cell markers (CD3, CD2 and CD5. CD7 when is >50%) is indicative of T cell lymphoma.
Aberrant phenotype (e.g. CD20 aberrant expression in T-cells or BCL2 expression in B cells with germinal center phenotype) is a feature of malignant lymphoid cells.
Rule out HIV-related CD8+ cutaneous PSL when biopsy shows a lymphocytic infiltrate with epidermotropism of cytotoxic CD8+ lymphocytes in the context of erythroderma.
Molecular studies: Clonality assessment is an important tool for the diagnosis of lymphoproliferative disorders, even though clonality does not always imply malignancy.

Conclusion: Familiarity with the histologic, immunophenotyping, molecular findings that occur in cutaneous pseudolymphomas and most important, the clinicopathological correlation, are imperative in preventing misdiagnosis of lymphoma and avoid unnecessary treatments.