

Unctuous and Desultory-Nevus Lipomatosus Superficialis

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Received: October 03, 2024

Published: November 01, 2024

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Nevus lipomatosus superficialis is an infrequently discerned neoplasm composed of nodules of mature adipose tissue. Initially scripted by Hoffman and Zurhelle in 1921, tumefaction is commonly confined within the dermal region.

Additionally designated as nevus lipomatosus cutaneous superficialis or dermolipoma, tumefaction may appear as a solitary neoplasm. Alternatively, multiple tumours may be discerned.

Nevus lipomatosus superficialis is commonly observed as a congenital lesion. Alternatively, neoplasm may be discerned at 20 years [1,2].

Clinically, lesions appear to implicate gluteal region or upper thighs, especially the dermal region. Solitary tumefaction is frequently exemplified whereas multiple neoplasms are denominated as Hoffmann-Zurhelle lesions [2,3].

Neoplasm is contemplated to be a developmental anomaly or hamartoma [2,3].

Grossly, neoplasm manifests as soft papules or non encapsulated nodules of yellowish hue [3,4].

Upon microscopy, aggregates of mature adipocytes appear amalgamated within the dermal region. Tumefaction appears non contiguous with subcutaneous adipose tissue. Distinctive morphological alterations within superimposed stratified squamous epithelium appear absent [3,4].

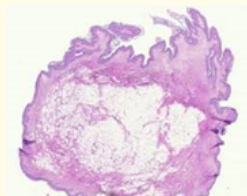


Figure 1: Nevus lipomatosus superficialis demonstrating aggregates of mature adipose tissue confined to the dermis. Lesion is non contiguous with subjacent adipose tissue. Superimposed stratified squamous epithelium appears unaltered [9].

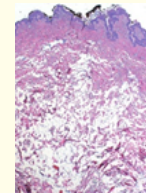


Figure 2: Nevus lipomatosus superficialis delineating aggregates of mature adipose tissue cells confined to dermal region. Neoplasm is non contiguous with subjacent adipose tissue. Superimposed stratified squamous epithelium exhibits acanthosis and hyperkeratosis [10].

Nevus lipomatosus superficialis requires segregation from neoplasms as fibro-epithelial polyp, neurofibroma or nevus sebaceous [5,6].

Morphological features	Florid follicular hyperplasia	Follicular lymphoma	Marginal zone lymphoma	Mantle cell lymphoma mantle zone pattern
Follicles	Enlarged, prominent GCs, distinct mantle zone	Variable diameter, faint mantle zones	Nodules, GC remnants, surrounding monocytoïd cells	Thickened mantle zones
Density	Low, widely spaced	Back to back	Variable, confluent	Variable
Magnitude	Uneven	Uniform	Variable	Uniform
GC border	Sharp, well defined	Fainted/crack artefact	Blurry	Sharp, well defined
Distribution	Cortical predominance, florid lesions in medulla	Cortex and medulla	Cortex and medulla	Uniform distribution in cortex/medulla
Extension to perinodal fat	Absent or uncommon	Frequent	Frequent	Uncommon
Mantle zone	Present, well developed	Attenuated to absent	Generally absent	Expanded
Marginal zone	Hyperplastic	Absent	Expanded, coalesce	Absent
GC cells			Colonized by monocytoïd cells	Absent
Tingible body macrophages	Common, present	Decreased or absent	Decreased or absent	Variable
Polarization	Present	Absent	Absent	Variable
Cytological features	Centroblasts/centrocytes, macrophages	Centroblasts, centrocytes	Monocytoïd/ plasmacytoïd, scattered large cells	Small/ intermediate centrocyte- like cells, few large cells
Immuno-architecture				
BCL2	GC-	FL grade I, II GC+, grade III 50%+	Tumour cells+, GC remnants-	Mantle zone+
BCL6, CD10	GC+	GC+, inter-follicular areas+	Negative, GC remnants+	GC+
Ki-67	High, polarized in GCs	Low, non polarized	Low, non polarized	Variable in mantle zones
CD21, CD23, CD35	FDC meshwork preserved	FDC meshwork preserved	FDC meshwork distorted	FDC meshwork preserved
Common positive markers	BCL6, LMO2, OCT2, HGAL	CD10, BCL2, BCL6, LMO2	CD43, MNDA, CD45+/-	Cyclin D1, SOX11, CD5
Common negative markers	CD3, BCL2	CD5, cyclin D1	CD10, cyclin D1, SOX11	CD10-, CD23- in mantle zones
Flow cytometry	Polytypic	Monotypic surface Ig, CD10+	Monotypic surface Ig, CD10-, CD5 weak/-	Monotypic surface Ig, CD5+

Table 1: Differentiation between Florid Follicular Hyperplasia and B cell Lymphomas with Follicle Formation [4,5].

GC: Germinal centre, FDC: Follicular dendritic cells, FL: Follicular lymphoma.

Neoplasm may be appropriately managed with surgical extirpation of the tumefaction [7,8].

Nevus lipomatosus superficialis appears devoid of tumour recurrence [7,8].

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9. Image 1 Courtesy: Dermnet NZ.
10. Image 2 Courtesy: Virtual grand rounds in dermatology.