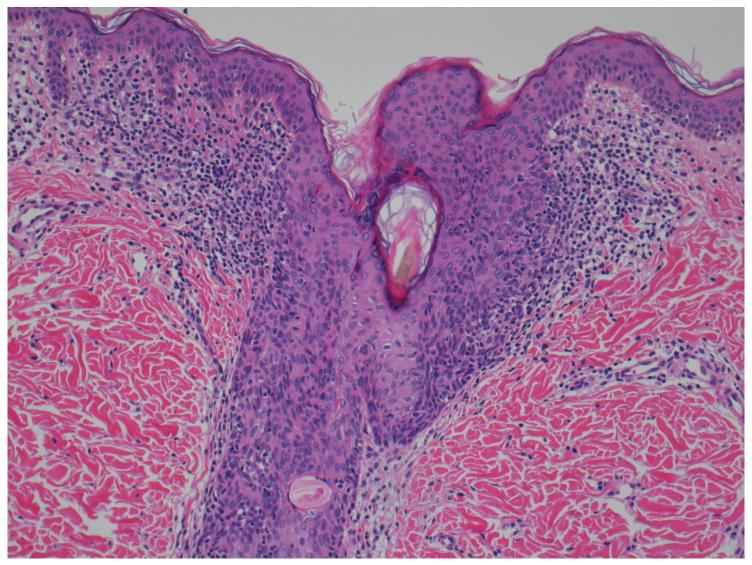
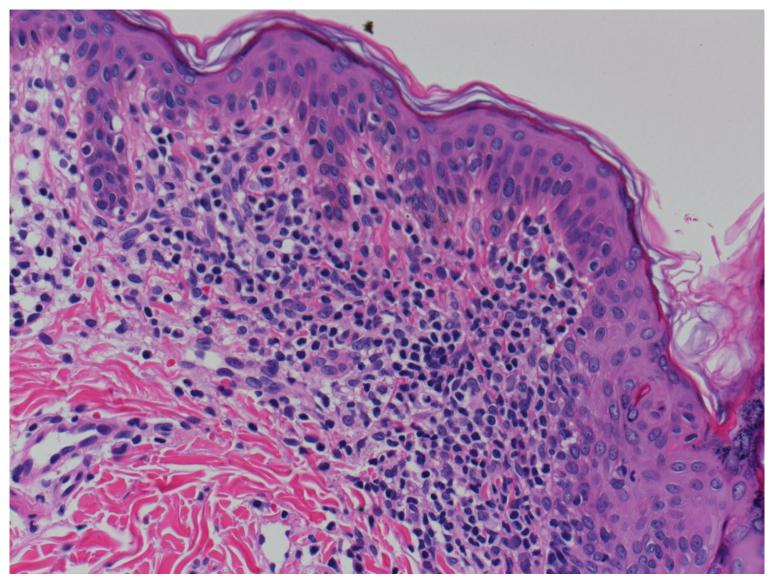
Interface dermatitis, vacuolar type

Skin biopsies displaying inflammation at the dermoepidermal junction suggest numbers of diagnostic possibilities. The correct diagnosis relies on careful integration of clinical, laboratory and histopathological features. Knowledge of clinical aspects of the disorders is crucial. There are two distinct microscopic patterns: cell-poor (vacuolar) and cell-rich (lichenoid) interface processes. Actually, a variety of dermatoses can display the interface dermatitis pattern. The vacuolar type includes erythema multiforme, Stevens-Johnson syndrome/toxic epidermal necrolysis, phototoxic dermatitis, graft-versus-host disease, toxic erythema of chemotherapy, and autoimmune connective tissue disorders. The lichenoid type includes lichenoid drug eruption, fixed drug eruption, paraneoplastic pemphigus/paraneoplastic autoimmune multiorgan syndrome, chronic GVHD, pityriasis lichenoides, secondary syphilis, lichenoid pigmented purpuric dermatosis, early lichen sclerosus et atrophicus, mycosis fungoides, lichenoid actinic keratosis, and lichen planus-like keratosis.

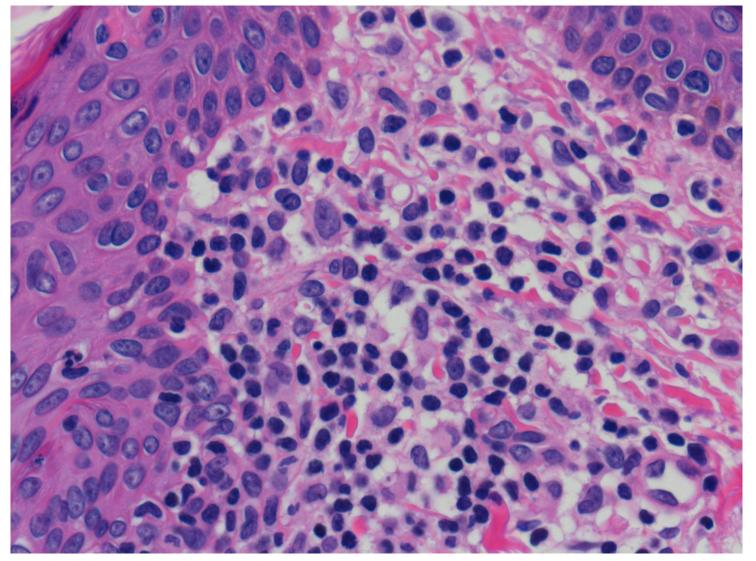
Ref.: Deschaine MA, Lehman JS. The interface reaction pattern in the skin: an integrated review of clinical and pathological features. Hum Pathol 2019; 91(9): 86-113. doi: 10.1016/j.humpath.2019.06.004



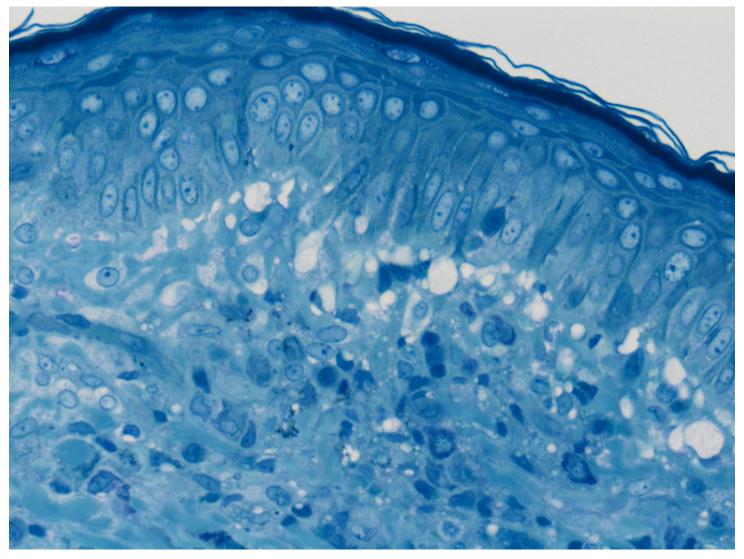
Interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Lymphocytic infiltration is clustered at the epidermodermal junction (H&E-1).



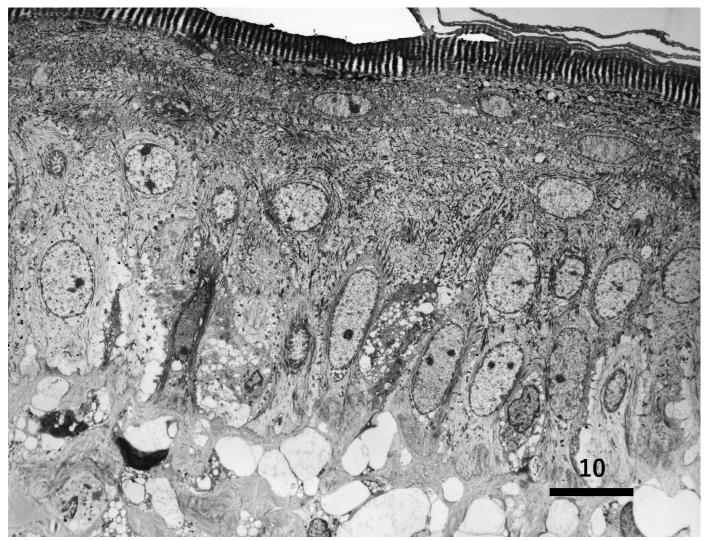
Interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Lymphocytic infiltration is clustered at the epidermodermal junction (H&E-2).



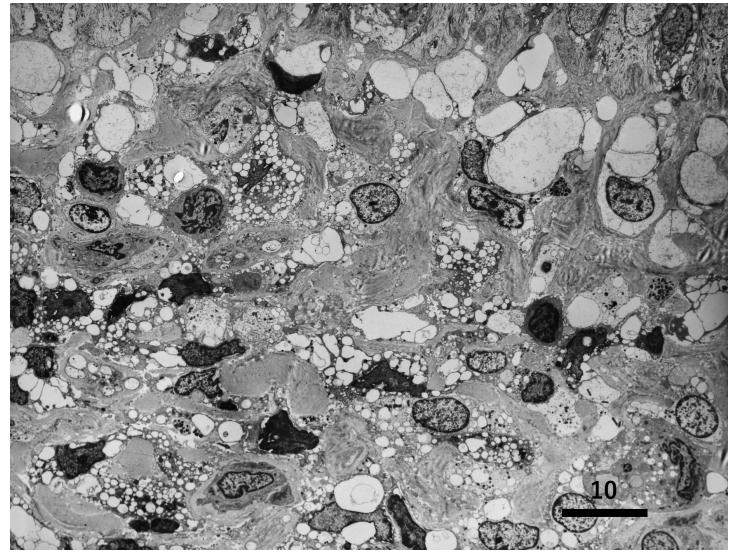
Interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Lymphocytic infiltration is clustered at the epidermodermal junction. Basal liquefaction with vacuolar change is associated (H&E-3).



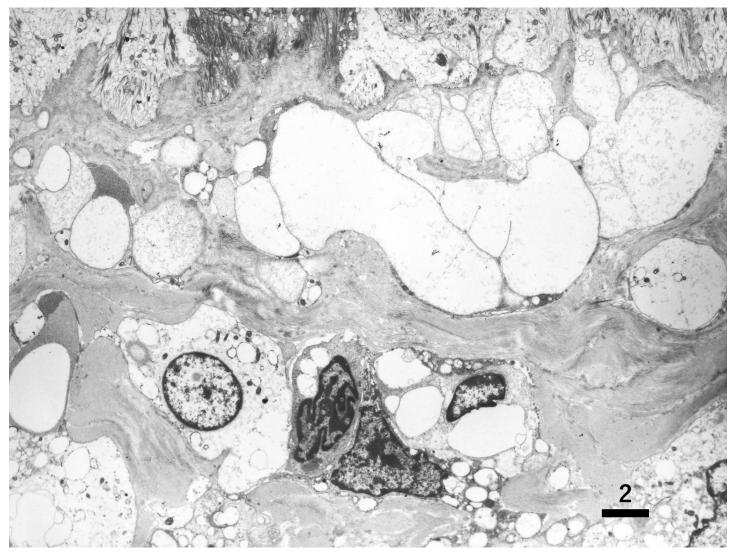
Interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Lymphocytic infiltration is clustered at the epidermodermal junction. Basal liquefaction with vacuolar change is evident (toluidine blue in a thick section for TEM).



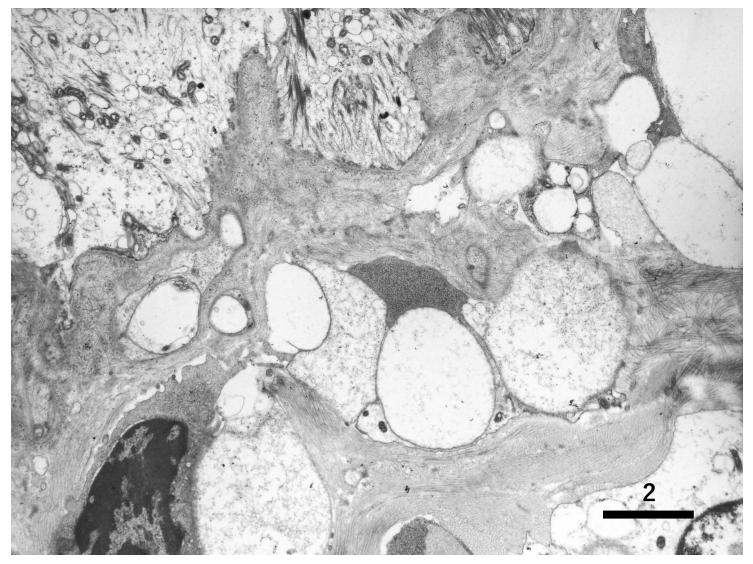
Ultrastructure of interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Vacuolar change of the basal keratinocytes is evident (TEM-1).



Ultrastructure of interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Vacuolar change of the basal keratinocytes is seen. The dermal inflammatory cells (macrophages and lymphocytes) also possess small vacuoles (TEM-2).



Ultrastructure of interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Vacuolar change of the basal keratinocytes is evident (TEM-3).



Ultrastructure of interface dermatitis, vacuolar type, seen on the upper back skin of a 3 years and 11 months-old boy. A 45 x 14 mm-sized red-colored eruption has persisted for 2 years. Vacuolar change of the basal keratinocytes is evident (TEM-4).