

**Supplement Table 1. Clinical features of major perforating dermatoses.**

Perforating dermatoses	Time of onset	Most common location	Morphology	Perforating substance	Associated diseases	Dermoscopic features	Prognosis
<b>Perforating lichen nitidus</b>	Childhood, early adulthood	Arms, wrists, chest, abdomen, and genitalia	Multiple, discrete, flesh-colored, dome-shaped papules of 2-3 mm size	Inflammatory debris	Unknown	A whitish-brownish area with scales in the center, a structureless yellowish area around the central scale, and a periphery, brown, delicate pigmentation	May spontaneous clearance several months later or slightly remission after treatment
<b>Kyrle disease</b>	Adulthood	Lower extremities, arms, head, neck	Hyperkeratotic papules and nodules with a central keratotic plug	Keratotic material with no collagen or elastic fibers	Renal failure (stages 4,5), diabetes mellitus, hemodialysis	A bright whitish-brownish scales in the center, a structureless whitish-grey area surrounding the central crusts, and a periphery brown, delicate pigmentation	Lesions regress after treatment but often recur when discontinuation of the medicine
<b>Reactive perforating collagenosis</b>	Childhood	Arms, hands, sites of trauma	Small, hyperkeratotic papules and ulcers with central keratinous plug	Collagen	Unknown	A central yellowish-brown structureless area surrounded by a whitish rim and pink-white structureless area, and a periphery hairpin vessels	May spontaneous remission or improvement by medicine
<b>Elastosis perforans serpiginosa</b>	Childhood, early adulthood; variable with penicillamine-induced EPS	Neck, face, arms	Small papules arranged in an annular pattern	Elastic fibers	Genetic diseases, penicillamine, connective tissue diseases	A central whitish structureless area surrounded by a crown of arborizing vessels	May spontaneous remission or persistence for years
<b>Perforating folliculitis</b>	Early adulthood	Trunk, extremities	folliculocentric, hyperpigmented papules and nodules	Necrotic material	Renal disorder, diabetes mellitus, Vitamin-A deficiency, tumour necrosis factor (TNF)-induced	Unknown	Partial or no improvement after treatment
<b>Acquired perforating dermatosis</b>	Adulthood	Extremities especially lower limbs, trunk	Umbilicated erythematous papules and plaques with central crater	Collagen, elastic tissue, or necrotic materials	Systemic diseases such as diabetes mellitus, renal failure, hemodialysis, or pruritus	A central bright white clods, a structureless whitish-grey area surrounding the central crusts, and a periphery reticular brown lines	Lesions could improve with management of the underlying internal disease and the treatment