Prurigo Nodularis

Prurigo nodularis is a chronic inflammatory dermatosis characterized by multiple intensely pruritic, lichenified or excoriated papulonodules chiefly located on the posterior surfaces of the extremities, often triggered by severe and refractory pruritus. This condition occurs mainly in adults, with a peak between age 51 and 65 years. Patients with an atopic diathesis have a much earlier age of onset. Dark-skinned individuals are more commonly affected. There is a female predominance. Pruritic dermatological diseases that may predispose to prurigo nodularis include atopic dermatitis (most common), nummular eczema, contact dermatitis, scabies, lichen planus, psoriasis, xerosis, dermatitis herpetiformis, linear immunoglobulin A disease, and bullous pemphigoid. Atopic predisposition is a major factor in approximately 50% of patients with prurigo nodularis. Systemic diseases associated with prurigo nodularis include hepatic dysfunction, chronic renal failure, chronic obstructive pulmonary disease, thyroid dysfunction, cardiovascular disease, cerebrovascular disease, polycythemia rubra vera, inflammatory bowel disease (eg, Crohn disease, ulcerative colitis), type 2 diabetes, malignancy (eg, leukemia, lymphoma, gastrointestinal carcinomas), infections (eg, HIV, hepatitis B virus, hepatitis C virus, Helicobacter pylori, mycobacteria, Strongyloides stercoralis), parasitic infestation, and psychosocial disorders (eg, emotional stress, anxiety, depression, obsessive compulsive disorder). It is generally believed that chronic mechanical scratching and/or rubbing as a result of pruritus leads to the development of papulonodular or plaque-like lesions, which may be excoriated, crusted, and lichenified.

Patients with prurigo nodularis often present with a long-standing history (≥6 weeks) of severe unremitting pruritus in the affected area, followed by the appearance of pruritic papulonodules. Clinically, papulonodules are multiple, firm, hyperkeratotic, and dome-shaped found mostly on extensor surfaces of the upper and lower extremities, followed by the trunk. The lesions can be flesh-colored, erythematous, or hyperpigmented. There is a tendency for symmetrical distribution. A linear arrangement of lesions is common. The size of an individual lesion ranges from ...
Pruritus is usually severe and confined to the lesions themselves. It can be constant, intermittent, or paroxysmal and may be accompanied by a stinging or burning sensation. The pruritus is often worsened by sweating, irritation from clothing, or heat. Alterations in lesional temperature have been reported. New lesions may develop from time to time, while some existing lesions may occasionally regress spontaneously. The skin between the lesions is usually normal but can be xerotic or lichenified. Excoriated lesions are at increased risk of secondary infection.

Prurigo nodularis is a chronic debilitating disease that can lead to sleep and psychosocial disturbances. The condition may cause a profound negative impact on quality of life. The diagnosis is clinical and based on a long-standing history (≥ 6 weeks) of severe unrelenting pruritus; history of repeated scratching, picking, or rubbing; and subsequent development of pruritic, excoriated, symmetrically distributed, papulonodular lesions in a vicious itch-scratch cycle. The diagnosis can be aided by dermoscopy and biopsy if necessary. Typical dermoscopic features include peripheral striations, pearly white area with starburst pattern, gray-blue globules, comedo-like openings, glomerular vessels, red dots and globules, brownish-black globules and yellow structures, crusting, and erosions.

Nodular Scabies

Human scabies is an infestation of the skin caused by an obligate human parasite mite, Sarcoptes scabiei var. hominis. Classic scabies (common scabies) typically manifests as an intensely pruritic eruption with a characteristic distribution pattern. Nodular scabies, a less common clinical variant of scabies, is characterized by extremely pruritic, erythematous, firm, nodules that persist even after adequate treatment of the initial scabetic infestation (Figure 5).

The pruritus is most intense at night. Nodular scabies occurs in approximately 7% of patients with scabies and is more common in men. Sites of predilection include the penis, scrotum, groin, buttocks, and axillary folds. These nodules do not contain live mites and do not indicate an active infestation. Rather, they represent a delayed type IV hypersensitivity reaction to retained mite parts, eggs, and/or fecal pellets (scybala) of a prior or current infestation. Some researchers propose that the condition may also be due to a deeper penetration of the mite from the epidermis into the dermis, resulting in a more vigorous inflammatory response.

REFERENCES


