Pustular Psoriasis

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A woman in her 60s with no past dermatologic history presented with a 4-month history of a pustular eruption. Before onset she had received steroid injections for cervical radiculopathy, but there were no other new medications or illnesses. Dermatologic exam showed more than 90% body surface area involvement with erythematous patches studded with pustules and diffuse skin sloughing (Figure 1) (Supplemental Figure 1, available online at http://www.mayoclinicproceedings.org). Skin biopsy specimens showed subcorneal neutrophilic pustules with hypogranulosis (Figure 2). Direct immunofluorescence and organism stains were negative. White blood cell count was elevated to 28/μL with neutrophilic predominance. Creatinine was 2.15 mg/dL (baseline 0.76). She was diagnosed with generalized pustular psoriasis and admitted for intravenous fluids and intensive full-body wet wrap dressings, which led to improvement. Ixekizumab was initiated for long-term treatment after failure of acitretin to control symptoms.

Generalized pustular psoriasis is a severe and uncommon psoriasis variant with onset in middle age. Patients may or may not have a prior history of psoriasis vulgaris. Medications, particularly systemic steroids, and infections are reported triggers. Cutaneous symptoms include erythematous, painful skin studded with small, sterile pustules accompanied by fever, malaise, and elevated white blood cell count with neutrophilic predominance. Extracutaneous manifestations include acute renal failure, cholestasis, cholangitis, and arthritis; these typically warrant inpatient admission and management.[1] Differential diagnosis includes acute generalized exanthematous pustulosis, which can have a similar clinical and histological presentation but is differentiated by history of recent antibiotic use and resolution within an average of 2 weeks.[2]

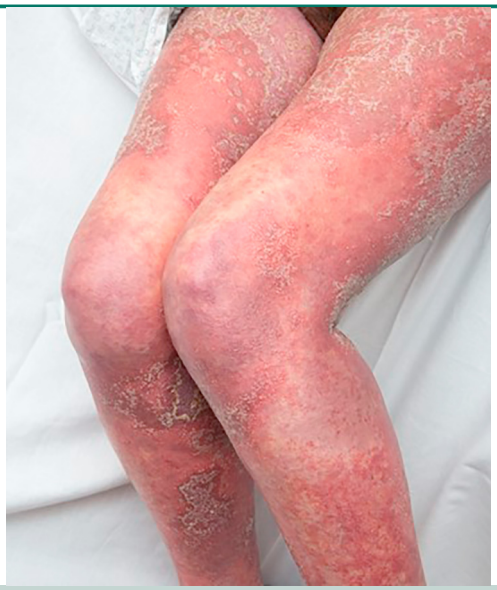

FIGURE 1. Erythematous patches studded with pustules covering extremities.

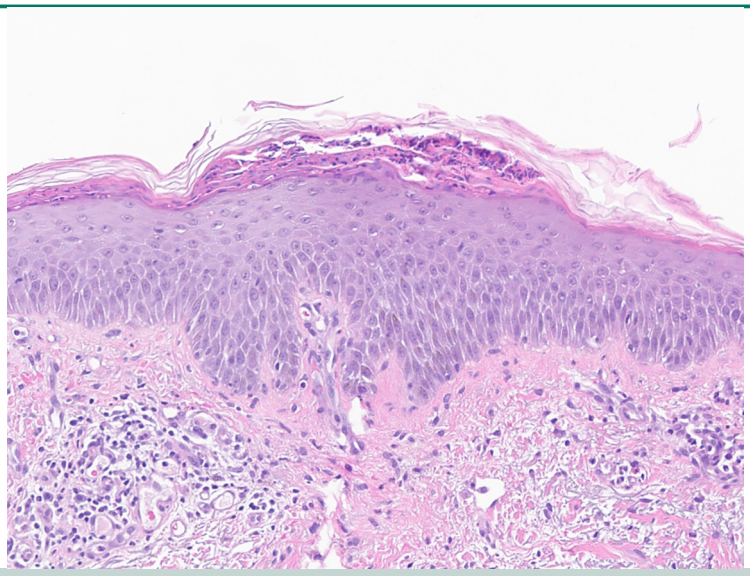

FIGURE 2. Subcorneal neutrophilic pustule with hypogranulosis (original magnification ×40; hematoxylin and eosin stain).

The traditional first-line treatment is acitretin.[1,3] Biologics, particularly infliximab and interleukin 17 inhibitors (ixekizumab and secukinumab), have more recently shown efficacy in treatment of recalcitrant cases.[1,4] Interleukin 17 inhibitors have the added convenience of self-administered injections and a favorable side effect profile. Lastly, avoidance of systemic steroids is crucial to avoid disease flares.

POTENTIAL COMPETING INTERESTS

The authors report no potential competing interests.

SUPPLEMENTAL ONLINE MATERIAL

Supplemental material can be found online at http://www.mayoclinicproceedings.org. Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.

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