Diffuse pruritic papules

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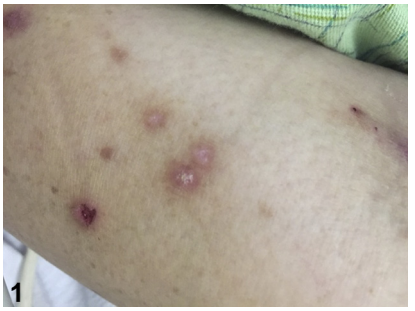

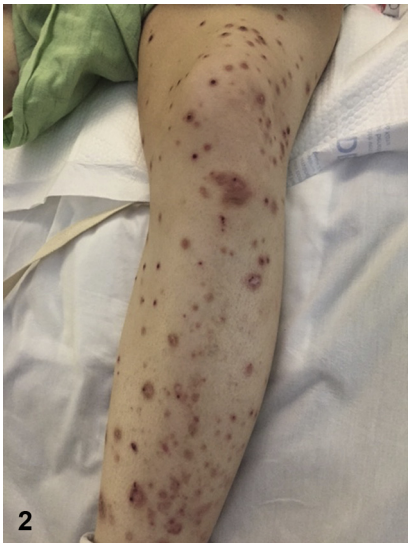

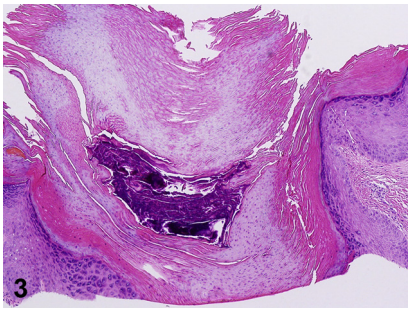

A 59-year-old Middle Eastern man with a 3-month history of metastatic hepatocellular carcinoma and diffuse pruritus presented with multiple pruritic nodules. He was seen previously for a 6- to 8-month history of diffuse pruritus and excoriations during 2 previous admissions, and pruritus of malignancy was diagnosed. No family members or close contacts had similar symptoms. Physical examination found diffuse erythematous papules with central umbilication and hemorrhagic crusting on the trunk and extremities (Figs 1 and 2). A 4-mm punch biopsy from the right side of the chest showed the results in Fig 3.

Question 1: What is the most likely diagnosis?

A. Arthropod bites

B. Prurigo nodularis

C. Scabies infection

D. Acquired perforating dermatosis (APD)

E. Atypical fungal infection

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Answers:

A. Arthropod bites — Incorrect. Arthropod bites would present with a more acute time course, and lesions would be marked by erythema and swelling consistent with an urticarial process. Although sometimes excoriated, these lesions are less likely to present with the classic keratotic, umbilicated appearance of those seen in APD.

B. Prurigo nodularis — Incorrect. Typically, prurigo nodules are dome-shaped papules that may have some degree of lichenification from chronic scratching. APD lesions are similar morphologically, but have a central keratotic core. Histologically, both prurigo nodularis and APD are marked by epidermal hyperplasia and hyperkeratosis. However, invaginations of the epidermis and areas of follicular plugging are more consistent with acquired perforating disease.

C. Scabies infection — Incorrect. Scabies infestation typically presents clinically with involvement of finger webs and wrists in affected patients. Skin scrapings viewed under microscopy will show scabies mites, eggs, or feces confirming infestation. In addition, lack of affected close contacts makes this diagnosis unlikely.

D. APD — Correct. APD has been associated classically with chronic renal failure and diabetes mellitus.[1] In these patients, it has been hypothesized that the pathogenesis is related to diabetic vasculopathy and mild trauma culminating in collagen damage.[2,3] Pruritus and chronic scratching may also play a role in the disease process.[1,4] Biopsy findings for this patient included follicular plugging with parakeratosis, flanking acanthosis, and sparse lymphocytic infiltrate, consistent with APD.

E. Atypical fungal infection — Incorrect. Although some atypical fungal infections may present with nodules, they are usually localized to one area.

Question 2: Which of the following comorbidities have NOT been associated with this condition?

A. Hodgkin lymphoma

B. Hidradenitis suppurativa

C. Malignant histiocytosis

D. Lung fibrosis

E. AIDS

Answers:

A. Hodgkin lymphoma — Incorrect. Hodgkin lymphoma is reported to be associated with APD.

B. Hidradenitis suppurativa — Correct. Hodgkin lymphoma, malignant histiocytosis, lung fibrosis, and AIDS have all been associated with cases of APD.[2,5] Hidradenitis suppurativa is the only condition from the above list that has not been reported in the literature as comorbid with APD.

C. Malignant histiocytosis — Incorrect. Malignant histiocytosis is reported to be associated with APD.

D. Lung fibrosis — Incorrect. Lung fibrosis is reported to be associated with APD.

E. AIDS — Incorrect. AIDS is reported to be associated with APD.

Question 3. Potential therapies for this condition include:

A. Methotrexate

B. Topical anthralin

C. Phototherapy.

D. Colchicine

E. Lactic acid lotion

Answers:

A. Methotrexate — Incorrect. Methotrexate is not a reported treatment for APD.

B. Topical anthralin — Incorrect. Topical anthralin is not a reported treatment for APD.

C. Phototherapy — Correct. Phototherapy is a commonly reported treatment for APD. Phototherapy, both broad and narrowband ultraviolet B and psoralen and ultraviolet A, have been used to treat APD.[1-4] Light therapy may help improve pruritus as well.[4] Other useful regimens include oral allopurinol, topical retinoids, topical and intralesion corticosteroids and anti-itch medications.[1-4]

D. Colchicine — Incorrect. Although oral allopurinol has been used to treat APD, colchicine has not.

E. Lactic acid lotion — Incorrect. Lactic acid lotion has not been reported as treatment for APD.

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