

cutis[®] Photo Quiz

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A 28-year-old African American woman presented for evaluation of itchy spots under the arms.

What is your diagnosis?

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The Diagnosis: Fox-Fordyce Disease

Fox-Fordyce disease also is known as apocrine miliaria.¹ It presents as a chronic pruritic skin condition localized to areas rich in apocrine glands.^{1,2} The most active areas of involvement are the axillary and pubic regions; however, the breast, the umbilicus, and the perineum also may be involved. The exact triggers of Fox-Fordyce disease are unknown, but landmark studies by Shelley and Levy¹ suggest that keratin plugs inside follicular infundibula obstruct the apocrine duct, causing rupture and inflammation. Pinpoint flesh-colored or hyperpigmented dome-shaped papules develop in the axillary and pubic areas, as well as other apocrine-bearing sites.^{3,4} Sweating and heat presumably account for aggravation of the condition in the summer months, and increased apocrine secretion after emotional or physical stress may exacerbate the condition. Fox-Fordyce disease occurs primarily in adult women (rarely before puberty⁵), and improvement has been noted late in pregnancy, implicating hormonal factors in the pathogenesis of this disease.⁶

Biopsy results have revealed dilatation of the apocrine duct with spongiosis.^{2,7} Horizontal sections may help identify areas with distinctive changes of the apocrine glands. The characteristic distribution of Fox-Fordyce disease helps differentiate it from folliculitis or lichen planus. Treatment response is difficult to predict. Because of their keratolytic effect and efficacy in reducing keratin plugs,³ topical retinoids (eg, tretinoin, adapalene, tazarotene) are typical first-line therapies. Topical retinoid cream or gel applied once or twice daily may help ameliorate Fox-Fordyce lesions. Intense itching usually is treated symptomatically with oral antihistamines. Topical steroids and topical antibiotics have had varied success in controlling acute flares. Topical clindamycin has been reported to be particularly effective,^{2,8} and, in extensive cases, superficial laser treatment and glycolic acid peels also have been of value. Oral contraceptives and oral isotretinoin may help prevent flare-ups in some individuals.⁴ Unfortunately, treatments are not curative, and multiple recurrences are common.

REFERENCES

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Flesh-colored and brown papules in the axilla.

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