Brownish Reticulated Papules and Plaques on the Trunk of a 20-year-old Man

Yu-Ju Tsai  Shu-Ling Hu  Wan-Ting Chiu  Yih-Yiing Wu*

CASE REPORT

A 20-year-old male visited our out-patient-clinic in July 2003 for the asymptomatic brownish skin lesions on his trunk for about 3 years. He ever received topical and oral antifungal agents intermittently under the impression of pityriasis versicolor but in vain. Physical examination revealed brownish reticulated papules and plaques on his neck, intermammary region, abdomen, axillae, and back (Fig. 1a). No spores or hyphae were noted by potassium hydroxide smear. Skin biopsy of abdominal lesion showed epidermal papillomatosis, hyperkeratosis with minimal superficial perivascular lymphocytic infiltration (Fig. 2).

Fig. 1
(1a) Brownish papules and plaques arranged in a reticular pattern over left side of trunk. Similar lesions are also seen over chest and back.
(1b) After 4 weeks of oral minocycline, 100 mg twice a day, the patient had obvious improvement.

Fig. 2
Skin biopsy of abdominal lesion showed epidermal papillomatosis, hyperkeratosis with mild superficial perivascular lymphocytic infiltration. (H&E, 40X)
DIAGNOSIS: Confluent and Reticulated Papillomatosis (CRP)

DISCUSSION
Confluent and reticulated papillomatosis (CRP), first described by Gougerot and Carteaud in 1927, is an uncommon disorder. The lesions appear as 1-2 mm erythematous to brownish papules, then are confluent into plaques centrally with a reticulated pattern at the periphery. Involvement of the chest, neck, shoulders and back is typical, with intermammary and mid-scapular areas being the initial and most common sites. Reported histological findings include hyperkeratosis, papillomatosis, and decreased granular layer with minimal to moderate acanthosis. The dermis may have mild perivascular inflammation. According to Hamilton’s review, the mean age at onset is 21 years (range 14 to 36 years), with a female to male ratio of 2.5:1. The cause of CRP is unknown. An abnormal host response to fungi (especially Pityrosporum orbiculare) or bacteria and abnormal keratinization are the most commonly proposed pathogenesis. Glucose intolerance, diabetes mellitus, thyroid disease and obesity have been reported in patients with CRP, and the relationships between these endocrine imbalance and CRP need to be further determined.

The clinical differential diagnosis of CRP includes tinea versicolor, acanthosis nigricans, erythema dyschromicum perstans (EDP), and prurigo pigmentosa. The characteristic distribution and pattern of the lesions with the absence of fungi by potassium hydroxide examination readily differentiate CRP from tinea versicolor and acanthosis nigricans. EDP has an elevated erythematous border in the early stages that is different from CRP. Besides, the papillomatous epidermal change of CRP, both clinically and histologically, was not seen in EDP. Unlike the relative asymptomatic CRP, prurigo pigmentosa always has an “itching” stage with erythematous papules even papulovesicles. The histopathologic finings of prurigo pigmentosa, including psoriasiform hyperplasia, lichenoid tissue reaction with spongiosis, exocytosis, and liquefaction degeneration of the basal layer, is also different from CRP.

There is no single treatment that is proved superior to others. However, successful treatment with minocycline is most commonly reported. The usual dose is 100 to 200mg per day, which works in 4 to 8 weeks with either partial or complete clearance. Although recurrence is occasionally seen, reintroduction of minocycline clears the lesions as the initial treatment. In addition, cases responsive to other antibiotics, including doxycycline, erythromycin and azithromycin, have been reported. Other agents reported to be effective include oral vitamin A, etretinate and isotretinoin as well as topical agents such as tretinoin, tazarotene and calcipotriol. Our case had dramatic improvement after a four-week course of minocycline 100 mg twice a day plus topical tretinoin cream (Fig. 1b), CRP, due to its clinical resemblance to tinea versicolor, is one of the differential diagnosis that should be kept in mind. Once diagnosis is confirmed, oral minocycline and/or topical vitamin- A analogue should be considered as the first choice because of their effectiveness and safety and the dramatic improvement in one month.

REFERENCES