

Case 19

A 31-year-old Thai woman from Bangkok

Chief complaint: Multiple brownish rash on neck and trunk for 10 years



Present illness: The patient presented with 10-year history of progressive multiple pruritic brownish patches on trunk. The lesions gradually became darker and larger. They spread to neck and both arms within one year. She denied using any perfume or lotion, and had not received any previous treatment.

Past history

She had a suspected polycystic ovary syndrome one year earlier based on her history of menstruation irregularity and general appearance.

Physical examination

GA: moon face, truncal obesity, Height 162 cm, BW 107 Kg, BMI 40.83

HEENT: no pale conjunctiva, no icteric sclera

Respiratory: normal breath sound

Abdomen: no hepatosplenomegaly

Skin examination

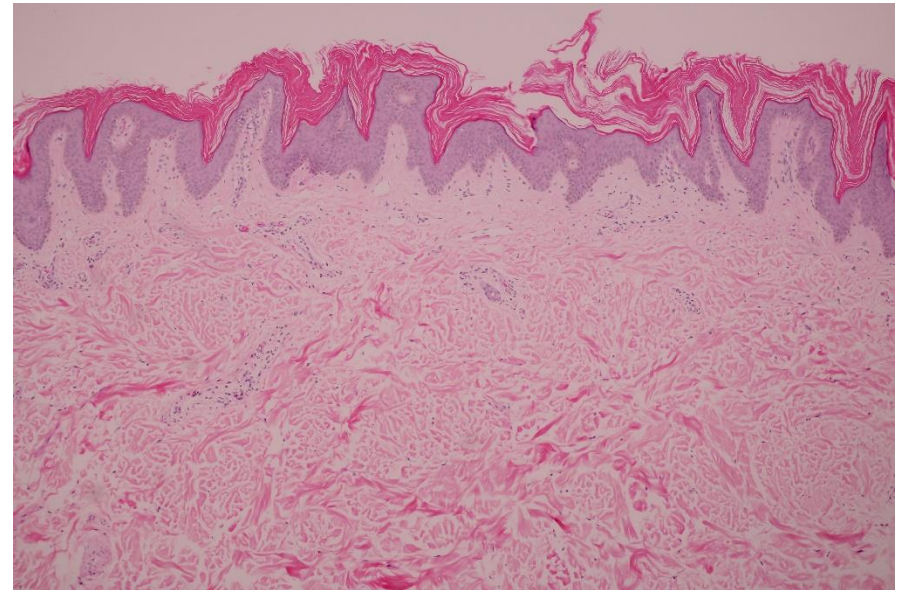
Multiple ill-defined minimal-scaling reticulated brownish patches were observed on neck, upper arms, upper chest and upper back, and velvety dark brown patch at both axillae.

Investigation

Scotch tape technique: negative for yeast

Histopathology (S15-029482, trunk, 40X)

Laminated hyperkeratosis, Papillomatosis and mild epidermal hyperplasia



Diagnosis: Confluent and reticulated papillomatosis of Gougerot and Carteaud

Treatment: Doxycycline(100) 1 tab oral bid. pc
10%lactic acid apply lesion hs.
10%urea cream apply lesion bid.

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Discussion:

Confluent and reticulated papillomatosis (CARP) is a rare dermatologic condition. It was first described by Gougerot and Carteaud in 1927¹. CARP has been reported worldwide and in all racial groups². The mean age at onset of the skin eruption was 15 years, with a range of 8-32 years³. Most patients were asymptomatic and were seen predominantly for cosmetic reasons; some patients had mild pruritis^{2, 3}.

The condition is characterized by persistently brown, scaly macules, papules, patches and plaques spread centrifugally to confluent lesions in the center and reticular pattern peripherally. CARP can also manifest as atrophic macules with a shiny quality or with surface change resembling cigarette paper. The most common sites of involvement are the inframammary area, breasts, axillae, neck, upper abdomen, as well as interscapular area^{3, 4}. Rarely, CARP develops at other sites, such as inguinal region, knee, elbow, hand, antecubital and popliteal fossa^{2, 4}.

The etiology and pathogenesis of CARP are not precisely known⁵. Several causes for CARP have been suggested, including: a keratinization disorder; a reaction to *Pityrosporum ovale*, an eruption related to an endocrinopathy; a reaction to UV light; a process involving amyloidosis; and a genetic factor^{2, 4}. The strongest evidence support of the pathogenesis is a

disease of keratinization^{2, 3}. An inappropriate expression of keratin16 in the stratum granulosum with an increase in transitional cell number has been documented in one report⁵. CARP has commonly occurred in patients with endocrine abnormalities. S Özdemir et al.⁶ reported a 21-year old woman diagnosed with CARP and PCOS. The present study does not support the notion that the fungus *Malassezia* is involved in the pathogenesis due to the poor response to antifungal treatment and the negative KOH finding in 75% of the cases³.

The criteria for diagnosis of confluent and reticulate papillomatosis are:^{2, 3}

- Clinical findings include scaling brown macules and patches, reticulated and papillomatous at least in part
- Involving of upper trunk and neck
- Negative (scale) fungal staining
- No response to antifungal treatment
- Excellent response to minocycline

Histopathology shows hyperkeratosis with thinning of the granular layer, acanthosis, and papillomatosis. The dermis shows perivascular inflammation.

Treatment of CARP remains a major challenge. Minocycline has been widely considered/regarded as the treatment of choice for this condition^{7, 8}. It is believed that minocycline, tetracycline and doxycycline influenced CARP through their anti-inflammatory effect⁵. CARP also responds to low and high-dose isotretinoin therapy. Other treatment modalities reported include topical tretinoin, calcipotriol¹, combined contraceptive containing drospirenon⁶, selenium sulphide².

References

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