### **CASE 17**

A 47-year-old Thai teacher from Ranong . Chief complaint:

Multiple small papules on both forearms for 5 years Present illness:

She has developed multiple small papules, mildly itching at both forearms for about 5 years. The lesions were not improved and persisted.

#### Past history:

She had hypertension for 2 years and now on propranolol

### Physical examination:

Multiple discrete and confluent erythematous small papules on both forearms.

Fig. 17.1



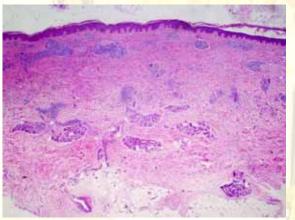
Lab investigation:

CBC: Hb 13.6 g/dl, Hct 40.5%, WBC 9100/mm<sup>3</sup>, PMN 43%, lymphocyte 48%, monocyte 7%, eosinophil 2%, platelet 286,000

FBS 88 mg/dl, BUN 10 mg/dl, Cr 0.7 mg/dl

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### Histopathology: (S06-00847)

Dense superficial and deep perivascular and interstitial infiltration. Inflammatory cell infiltrate in the dermis.

Lymphocyte infiltrate around blood vessels, histiocyte scattered between the collagen bundle with mucin deposit. Diagnosis: Generalized granuloma annulare (Interstitial type) Presenter: Suttinan Wichyanrat Consultant: Siripen Pauvilai

Treatment: Clobetasol propionate 0.05% apply b.i.d. Discussion:

Granuloma annulare is a benign, usually self-limited dermatosis of unknown cause, characterized by necrobiotic dermal papule with annular configuration. It occurs most commonly in children and young adult. It affected female twice as often as male.

Clinically, granuloma annulare can be divided into localized, generalized, subcutaneous, perforating, patch, arcuate dermal erythema and actinic granuloma.

The localized form is the most common type of granuloma annulare. The lesion consists of small, firm, asymptomatic papules that are flesh-colored or pale red and are often arranged in a complete or half circle. It most commonly appears on the dorsa of the hand and feet.

The generalized form occurs about 15 percent of all patients with granuloma annulare. The lesions consist of hundreds of 1-2 mm skin-colored papules that are either discrete or confluent but only

Fig. 17.2

rarely show an annular arrangement. These patients are usually either younger than 10 years or older than 40 years. Symmetry is a usual feature. The lesions are common on trunk, neck, forearms, legs and extensor surface of the elbows.

A relationship of granuloma annulare to diabetes mellitus has been observed by several authors.

Histologically, granuloma annulare shows infiltration of histiocytes and a perivascular infiltrate of lymphocytes that is usually sparse.

The histiocytes may be present in an interstitial pattern without apparent organization or in palisaded, surrounding area with prominent mucin. The patterns between these two extreme occur and a biopsy may show histiocyte that are not palisaded, slightly palisated or well palisaded.

Increased mucin is almost always apparent on routine staining section as faint blue material with a stringy, finely granular appearance. Stain sush as colloidal iron and alcian blue can be used to highlight mucin.

Treatment of granuloma annulare is such as intralesional steroid injection or potent topical glucocorticoid. PUVA is beneficial for wide spread disease.

The lesion of granuloma annulare tends to resolve spontaneously. Although a retrospective study indicates that the prognosis for patient with generalized disease is no worse than localize disease, most dermatologists believe that resolution is less likely in middle age patients with widespread, generalized form.

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