Hong Kong J. Dermatol. Venereol. (2013) **21**, 210-211

Dermato-venereological Quiz

ECY Chu 朱灼欣 and WY Lam 林偉業

A 48-year-old Filipino lady presented with rash over both sides of the face for 10 years. The rash extended from the temporal region to the cheek region. It was non-itchy and non-tender. Physical examination showed indurated erythematous plaques over bilateral cheeks extending to the temporal regions (Figure 1). There was no obvious epidermal change. There was no telangiectasia, no ulcer nor erosion. Examination of the rest of the body was unremarkable. Blood tests including complete blood picture, liver and renal function tests were normal and anti-nuclear antibody was negative. Incisional skin biopsy was performed on the right cheek (Figures 2-5).

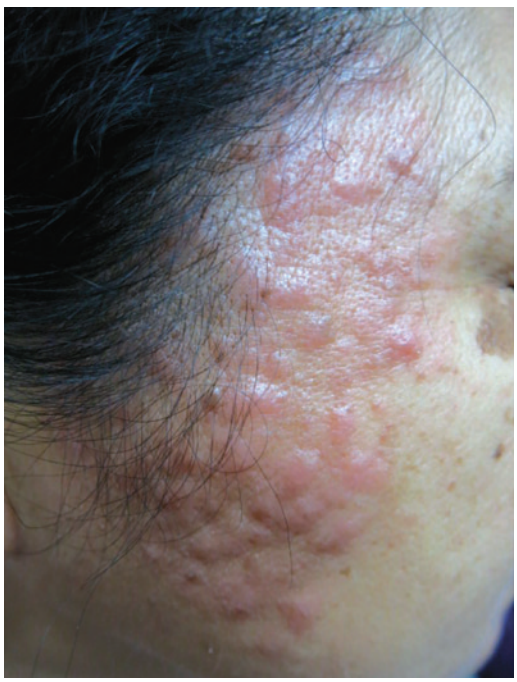

Figure 1. Indurated erythematous plaques over bilateral cheeks.

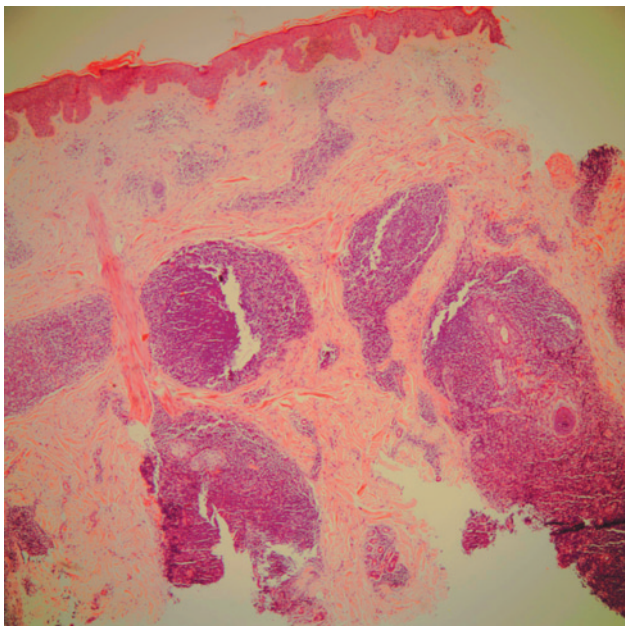

Figure 2. There are focal dense nodular lymphoid aggregates in the superficial to deep dermis (H&E Stain, Original magnification x 50).

Social Hygiene Service, Department of Health, Hong Kong

ECY Chu, FHKCP, FHKAM(Medicine)

Histopathology and Cytology Laboratory, Public Health Laboratory Centre, Department of Health, Hong Kong

WY Lam, MHKCPath

Correspondence to: Dr. ECY Chu

Wan Chai Female Social Hygiene Clinic, 7/F, Tang Chi Ngong Specialist Clinic, 284 Queen's Road East, Wan Chai,

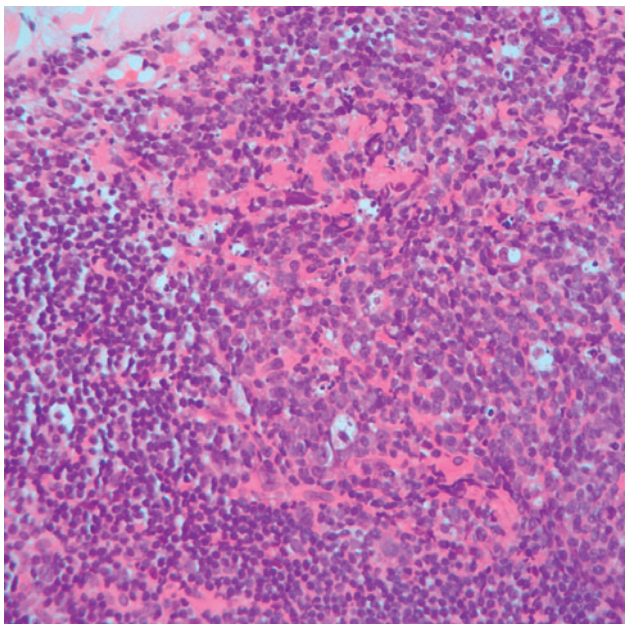

Figure 3. There are some tangible body macrophages seen (H&E Stain, Original magnification x 400).

Questions

1) What are the clinical differential diagnoses?
2) What are the histological findings?
3) What is the most likely diagnosis?
4) What are the treatment options?

(Answers on page 221)

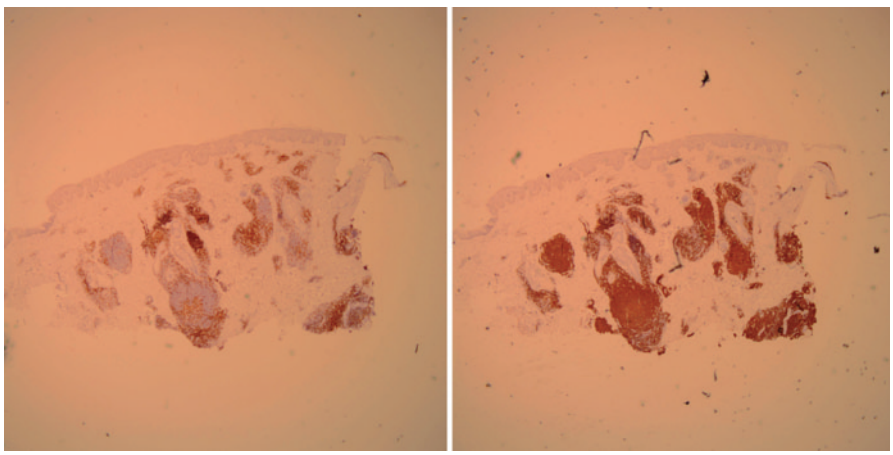

Figure 4. Immunohistochemical studies using CD3 and CD20 show that there is a mixture of B- and T-cells.

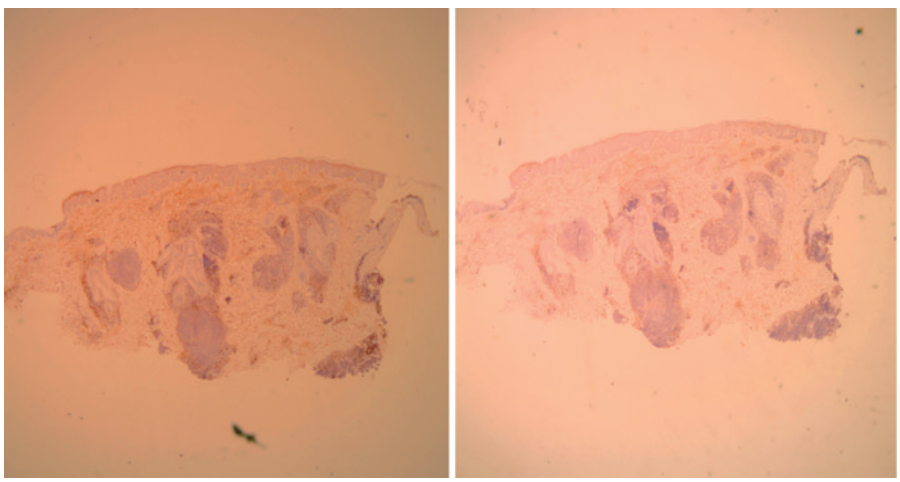

Figure 5. Kappa and Lambda stain.

Answers to Dermato-venereological Quiz on pages 210-211

1. Cutaneous lupus erythematosus (discoid lupus), cutaneous mycobacterial infection (lupus vulgaris), cutaneous reactive lymphoid hyperplasia and Jessner's lymphocytic infiltrate.

2. There are focal dense nodular lymphoid aggregates in the superficial to deep dermis. The lymphoid cells form vague follicles focally and are composed of cells ranging from small to large size with occasional tangible body macrophages (Figure 3). Tangible body macrophages are macrophages that contain the cellular debris, reflecting the underlying rapid cell turnover. This finding is suggestive of reactive lymphoid hyperplasia even though it can be found in some aggressive lymphoid conditions such as Burkitt's lymphoma. There are no intra-epidermal lymphoid aggregates or evidence of destruction of adnexal structures. Immunohistochemical studies using CD3 and CD20 show that there is a mixture of B- and T-cells with predominant B-cell aggregates, forming nodules and T-cells scattered within the B-cell areas. Kappa and lambda stains show no immunoglobulin light chain restriction.

3. The diagnosis is cutaneous reactive lymphoid hyperplasia, B-cell. Cutaneous reactive lymphoid hyperplasia simulates cutaneous lymphoma but it behaves in a harmless manner and appears to be a reactive process. Most cases cannot be attributed to any cause, but in some cases, there is an underlying trigger e.g. tattoo dyes, insect bites, trauma or infection (e.g *Borrelia burgdorferi, Varicella zoster virus* and *Human immunodeficiency virus*).

4. The first step of treatment is to remove any underlying causes. Other treatment options include superpotent topical steroids, intralesional corticosteroid injections, topical tacrolimus, hydroxychloroquine, cryotherapy, surgical excision and radiotherapy. As reactive lymphoid hyperplasia is a relatively harmless condition, observation with careful follow-up is a reasonable option.