This 57-year-old Chinese man presented with itchy plaques over his lower legs, ankles and feet for three months (Figures 1a & 1b). The rash progressively increased in size. He suffered from chronic obstructive pulmonary disease and had history of pulmonary tuberculosis. There was no recent administration of drugs. He had no venereal exposure in recent four years. Examination revealed annular and arcuate erythematous plaques with central clearing and pigmentation. Scaling was present on some lesions. There were no other significant systemic symptoms and signs. Skin scrapes for fungus was negative.

Questions

1. What are the clinical differential diagnoses?
2. A diagnostic skin biopsy was done (Figures 2a & 2b). What are the histological features?
3. What further investigations would you order?
4. What is the management for this man?
**Figure 1b.** Close-up view.

**Figure 2a.** H&E, original magnification x 20.

**Figure 2b.** H&E, original magnification x 200.

(Answer on page 51)
Answers to Dermato-venereological Quiz on page xxx

1. The clinical differential diagnoses in this man include psoriasis, fungal infection, cutaneous lupus erythematosus, mycosis fungoides, granuloma annulare, necrobiosis lipoidica diabeticorum and secondary syphilis.

2. At scanning magnification, the pattern is that of superficial and deep perivascular dermatitis, psoriasiform lichenoid, with surface crust. The high magnification reveals a predominantly plasma cell infiltrate but also some lymphocytes and histiocytes. This histology is virtually diagnostic for secondary syphilis.

3. Serology for syphilis should be checked. In this patient, the VDRL titer was 1:64. His FTA-ABS (Flourescent Treponemal Antibody-Absorption) and TPHA (Treponema Pallidum Haemagglutination) tests were both positive. Screening for other sexually transmitted infections should be done.

4. As he denied any venereal exposure in recent four years, the clinical diagnosis was relapsing secondary syphilis. He was treated with penicillin injection and his skin rash subsided after treatment. In untreated syphilis, relapse of skin rash occurs in around 25% of patients. Ninety percent of the relapse occurs within the first year. The eruptions tend to be more configurate or annular, larger, and asymmetrical although it is usually less extensive.

Reference: