

Dermato-venereological Quiz

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A 30-year-old lady presented with a hyperkeratotic violaceous plaque over her right knee for just over a year. It started several weeks after she accidentally fell on to the ground in the fish market and sustained an abrasion injury to her right knee (Figure 1). The plaque progressively increased in size and measured 5 x 3 cm. There was no satellite lesion or sign of sporotrichoid spread, no joint pain or swelling and no sign of systemic involvement. Skin biopsy was performed, and tissue culture confirmed the clinical diagnosis (Figures 2 & 3).



Figure 1. Indurated plaque on anterior right knee.

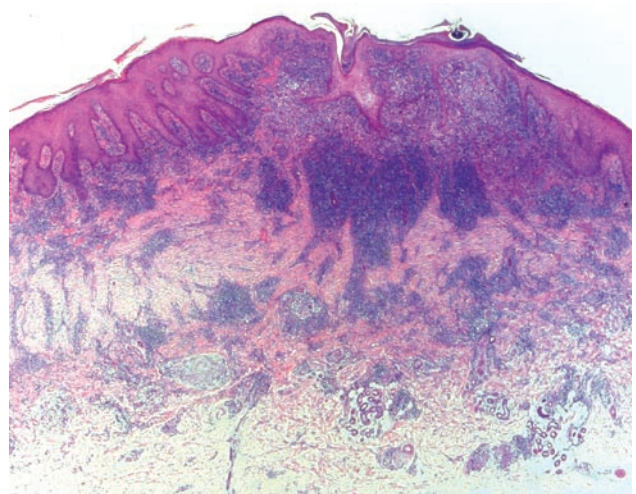


Figure 2. There is epidermal hyperplasia with dense chronic inflammatory infiltrate in the upper dermis. A few non-necrotising granulomas are present. (H&E, Original magnification x 25).

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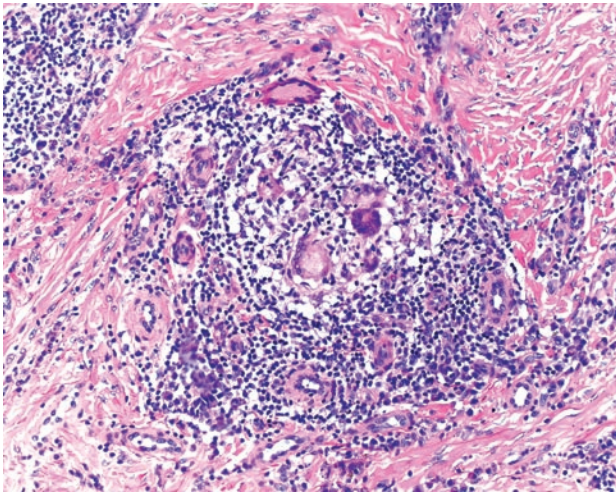


Figure 3. Non-necrotising granuloma with epithelioid histiocytes and multi-nucleated giant cells. (H&E, Original magnification x 200).

Questions

1. What are the differential diagnoses and the likely clinical diagnosis?
2. What are the skin biopsy findings?
3. What are the common sites of involvement?
4. What are the treatment options?
5. What are the potential complications?

(Answers on page 183)

Answers to Dermato-venereological Quiz on pages 171-172

1. The differential diagnoses include infective granuloma such as fish tank granuloma, tuberculosis verrucous cutis and subcutaneous fungal infections, or non-infective causes such as foreign body granuloma, sarcoidosis and keloid scar. The likely clinical diagnosis is fish tank granuloma due to *Mycobacterium marinum* infection acquired from the fish market.
2. The skin biopsy showed a few non-necrotizing granuloma among chronic inflammatory infiltrate in upper and mid dermis admixed with multinucleated giant histiocytes. No peri-neural involvement was noted. No acid fast bacilli (AFB) or fungal micro-organism was demonstrated with special stains. The histopathology is consistent with granulomatous inflammation and infective aetiology cannot be excluded. Tissue culture confirmed *Mycobacterium marinum* infection.
3. The common sites of involvement are hands, feet, extensor surfaces of elbows and knees which are sites prone to trauma.
4. Antimicrobial treatments include cotrimoxazole, minocycline, clarithromycin, rifampicin and ethambutol. Treatment duration is for at least 1 to 2 months after resolution of lesions, which is usually 3-4 months. When empiric therapy fails, multi-drug treatment should be based on laboratory sensitivities. Surgery may be considered.
5. Lesions typically resolve spontaneously over months, but may persist or disseminate. Occasionally synovitis, draining sinuses, bursitis, arthritis and osteomyelitis occurs. Thicken indurated tendon sheaths in the hand may limit range of motion and function.



Web sites of Dermatology & Venereology in Hong Kong

The homepage of The Hong Kong Society of Dermatology & Venereology
<http://www.medicine.org.hk/hksdv/>

Hong Kong Journal of Dermatology & Venereology
(Official Publication of The Hong Kong Society of Dermatology & Venereology)
<http://www.medicine.org.hk/hksdv/journal.htm>

The homepage of The Asian Dermatological Association
<http://www.medicine.org.hk/ada/>

