

Dermato-venereological Quiz

KHN Chan 陳厚毅 and GPS Yeoh 楊佩成

A 52-year-old Caucasian presented with a firm nodule over left arm for around one year that was increasing in size. There were no similar lesions over the other areas of the body. He complained of occasional discomfort over the lesion but there was no pain or itchiness. Physical examination showed a non-tender firm nodule 1.1 cm x 0.9 cm over left arm (Figure 1). He had no systemic symptoms. He enjoyed a good past health. He had no history of trauma and was not on any medication. Excisional biopsy was performed over left arm.



Figure 1. A firm nodule over the left arm.

Questions

- 1) What are the clinical differential diagnoses?
- 2) Excisional biopsy was performed. The histology was shown (Figure 2). What is the diagnosis?
- 3) What are the possible causes for this condition?
- 4) If multiple lesions are found in a paediatric patient, what disease should be screened?
- 5) What are the treatment options?

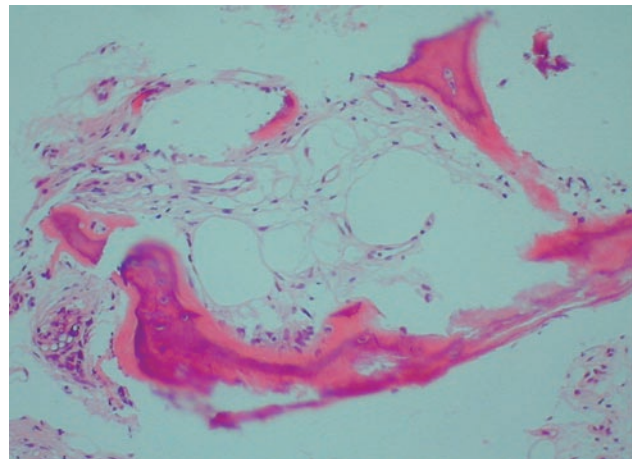


Figure 2. H & E stain. (Original magnification x 200)

Private Practice, Hong Kong

KHN Chan, MRCP(UK), FHKCP, FHKAM(Medicine)

Histopathology Unit, Canossa Hospital, Hong Kong

GPS Yeoh, FRCPA, FHKCPath, FHKAM (Pathology)

Correspondence to: Dr. KHN Chan

Room 1605-1609, Admiralty Centre Tower 1, 18 Harcourt Road, Hong Kong

(Answers on page 123)

Answers to Dermato-venereological Quiz on page 110

- 1) The clinical differential diagnoses include calcinosis cutis, gouty tophus, cartilaginous tumour, osteoma cutis and cutaneous metastasis.
- 2) Figure 2 shows bony trabeculae rimmed by osteoid and containing scattered bland osteocytes in the lacunae. Fatty tissue is noted between the trabeculae. The pathological diagnosis is compatible with osteoma cutis.
- 3) The cause of osteoma cutis can be primary (in the absence of pre-existing lesion) or secondary to either inflammatory or neoplastic conditions – including acne vulgaris, pilomatricoma and basal cell carcinoma.
- 4) If a paediatric patient complained of multiple osteoma cutis, he/she may suffer from Albright hereditary osteodystrophy. Albright hereditary osteodystrophy is caused by an autosomal dominant defect in the alpha subunit of intracellular guanyl nucleotide-binding protein (G protein) leading to pseudohypoparathyroidism and pseudopseudohypoparathyroidism. Affected patient usually present with short stature, a round face, defective teeth, mental retardation, brachydactyly, and osteomas of the soft tissue and skin. Tetany may signify pseudohypoparathyroidism.
- 5) The main treatment of osteoma cutis is surgical excision. Other reported treatments include laser resurfacing by Er:YAG laser or carbon dioxide laser to unroof overlying skin, topical application of tretinoin to provoke transepidermal elimination.