Images in Clinical Medicine

Calciphylaxis
Darren Andrade, MD

A 51-year-old man with a history of end-stage renal disease on hemodialysis and diabetes mellitus presents with suprapubic pain and a worsening penile ulcer that he first noticed two months ago. What finally prompted the patient to go to the emergency department was the new symptom of urinary urgency—a symptom that concerned the patient as he had been anuric for five years. CT scan revealed calcification of the left pleura, vas deferens calcifications, and diffuse severe calcified atheromatous changes throughout the central and peripheral vasculature. These findings in combination with a painful ischemic necrotic penile ulcer strongly suggest the diagnosis of calciphylaxis. Due to the patient’s severe vascular insufficiency a skin biopsy has not been performed, as the wound will likely have difficulty healing after biopsy.

Figure 1. Painful ischemic necrotic penile ulcer

Chronic Tophaceous Gout
Sara Beltz, MD

Gout, existing since antiquity as “the king of diseases and the disease of kings,” can present as an acute gouty arthritis or as a chronic depositional arthropathy (chronic tophaceous gout). If left untreated, chronic tophaceous gout will develop in up to 30% of acute gout patients over 5 years. The prolonged hyperuricemia causes monosodium urate crystal deposition in the skin around the joints. Over time, this leads to painless nodular swellings on the extensor surfaces of any digit, the olecranon or prepatellar bursa, achilles tendon, or the helix of the ear. These tophi, usually 1-7mm, can have a chalky white discharge and may dissolve with treatment. Pain at the site of a tophus should be investigated by tapping the joint for fluid analysis and starting empiric antibiotics as these joints can become secondarily infected.

Figure 1. Nodular swellings from chronic tophaceous gout.
Digital Clubbing

Yiu Tak Leung, MD, PhD

This is a 66 year-old male with a history of cirrhosis who came into the office for a routine check-up and was noted to have “drumbstick fingers” or digital clubbing. Digital clubbing is a clinical sign most commonly associated with pulmonary diseases, such as lung cancer and interstitial lung disease, cyanotic heart disease and cirrhosis of the liver, but clubbing also may be idiopathic or congenital. Possible mechanisms include dilation of peripheral vessels and secretion of growth factors, such as platelet-derived growth factor PDGF and hepatocyte growth factor. The Schamroth’s test is positive when the small diamond-shaped window, created by opposing the dorsal surfaces of distal phalanges of corresponding fingers of opposite hands, is obliterated.

Figure 1. Digital clubbing

Photograph by Soham Vakil, MD