Near-toe amputation from prolonged compression stocking use

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DESCRIPTION
A 73-year-old man was referred to the acute medical team by his general practitioner with a suspected diabetic foot infection. He had a background of type 2 diabetes mellitus, chronic venous insufficiency and ulcers, peripheral vascular disease and deep venous thromboses (DVT).

The patient revealed that he had not removed his compression stockings for 4 months. He had chronic venous changes bilaterally, a swollen, erythematous right leg and foul-smelling discharge from his right foot with a deep wound at the base of his fourth toe due to compression by the distal edge of the stocking, with partial amputation of this digit (figure 1).

X-ray of his foot (figure 2) showed bone destruction of the right fourth toe in keeping with osteomyelitis. Venous Doppler scans showed acute and chronic thrombi in the distal deep veins. Arterial Dopplers demonstrated severe arterial disease in superficial and deep vessels. He was transferred to the vascular department for further care who arranged outpatient CT angiogram.

Compression stockings are used to prevent recurrence of venous disease and lymphoedema, to prevent post-thrombotic syndrome or recurrence of DVT. NICE (National Institute for Health and Care Excellence) guidelines advise that stockings should be taken off at bedtime and, where not possible, could be extended to a maximum duration of 7 days. Stocks should not be used in patients with significant arterial disease due to the risk of limb ischaemia and necrosis. This case highlights the sequelae of poorly fitting compression stockings that have not been removed regularly, and their use in patients with significant arterial disease.

Learning points
► Assess presence and severity of arterial disease before prescribing compression stockings.
► Ensure correct fitting of compression stockings.
► Educate patient on how to manage compression stockings and the duration of wear.