

Case 13 A septic great toe



Figure 13.1

Figure 13.1 shows the left hallux of a keen young amateur footballer. He limps into the accident and emergency department of his local hospital complaining of a very painful, swollen great toe.

There are two pathological processes here; what are they and how do they inter-relate?

- The primary condition is ingrowing of the toenail. In this case, both sides of the nail are involved.
- The secondary condition, on the medial side, is paronychia – infection of the soft tissues at the side of the nail, with all the classical features of acute infection – pain, swelling, heat and redness. This has resulted from trauma to the soft tissues by the ingrowth of the nail, which has allowed ingress of bacteria.

How could the primary condition, the ingrowing toenail, have been treated and this complication avoided?

The patient is advised as follows: Avoid cutting the nail downwards into the nail fold – cut the nail transversely.

Avoid tight shoes particularly “trainers” which allow the foot to sweat and the skin to macerate. Tuck a pledget of cotton wool daily into the side of the nail bed to enable the nail to grow out of the fold. Once this has been achieved, there is no risk of further trouble.

How should the infection be treated in the acute phase?

- Drainage of the pus by removal of the nail under general anaesthetic. The nail should grow back normally if the patient resists the temptation to cut the edges back.
- If the condition affects both sides of the nail, avulsion of the whole nail is necessary.
- Antibiotics are not usually required and resolution is rapid.

What treatment may be necessary in recurrent cases?

If one side of the nail is affected a wedge excision is performed, where the affected side (lateral or medial) of the nail is excised along with the nail bed. The nail bed is also treated with liquefied (undiluted) phenol to prevent re-growth.

If both sides of the nail are affected either both sides of the nail and nail bed are excised, or else the whole toenail is avulsed and regrowth is prevented either by excision of the nail root (Zadek’s operation*) and/or by treating it with undiluted liquefied phenol, with care being taken to protect the adjacent skin.

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*Frank Raphael Zadek (1914–1995), orthopaedic surgeon, Wigan.