Paronychia or an abscess: early diagnosis

Sir,

Infection in a diabetic patient is a potentially serious condition and early drainage of abscesses in such patients can prevent severe morbidity, diabetes crisis and even mortality. The use of paronychia, which has not previously been described, prevents unnecessary surgery in cellulitis and indicates the requirement for early surgery when pus is present. This is a particularly useful technique in hospital practice where junior surgical experience is becoming more limited and techniques to simplify treatment options can be very valuable.

A 63-year-old woman was seen in the surgical outpatient department with pain and tenderness in the distal phalanx of her right little finger. Onychogryphosis was noted and her symptoms had been present for 11 months. There had been no antecedent trauma. She had a past history of non-insulin dependent diabetes mellitus and hypertension and had been treated with antibiotics 3 weeks previously, but to limited effect.

On examination, it was difficult to decide whether this was cellulitis or purulent paronychia, where a plain radiograph was normal. An immediate ultrasound showed a definite area of pus (*Figure 1*) beneath the epidermis superior to the distal phalanx. An ultrasound taken in diffuse cellulitis without pus is shown in *Figure 2*.

With the European Working Time Directive and the 'New Deal' (NHS Management Executive, 1991), inevitably surgical experience will become more limited and any technique to simplify treatment options will becoming increasingly more valuable. Although the use of ultrasound has been widely described to differentiate between fluid collections, it has not been described previously for paronychia. The technique is simple and as long as an Aquaflex gel pad (Parker Laboratories, Fairfield, NJ, USA) is placed above the infected site, this

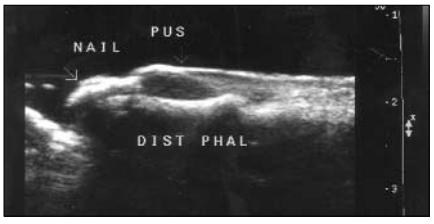

Figure 1. Ultrasound scan showing pus below the epidermis.

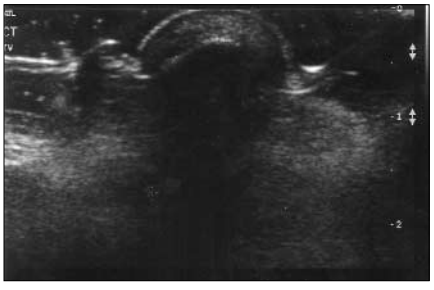

***Figure 2. Normal ultrasound scan of finger for comparison with* Figure 1.**

makes any pus present obvious on ultrasound screening. Similarly, if pus is not present antibiotics are indicated and surgical intervention is contraindicated to prevent unnecessary morbidity.

Ultrasound of suspected cases of paronychia caused by pus *vs* cellulitis is easily differentiated in the outpatient department and the indication for treatment options are simple and safe.

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NHS Management Executive (1991) *Junior doctors – the new deal: working arrangements for hospital doctors and dentists in training.* Department of Health, London

Patient-held ECG: a flexible friend

Sir,

The authors would like to suggest a simple idea for improving the rapid delivery of appropriate thrombolytic therapy to patients presenting with acute myocardial infarction. Thrombolytic therapy is indicated in patients who present within 12 hours of the onset of chest pain and who have certain electrocardiogram (ECG) changes (new onset ST elevation or left bundle–branch block), and have no contraindication to thrombolysis (Ryan et al, 1999). Early reperfusion leads to maximum benefit and therefore the aim is to thrombolyse suitable patients as soon as possible (Department of Health, 2003). However, thrombolysis is associated with significant complications (i.e. bleeding) so must be given appropriately.

In an emergency, interpretation of ECG changes can be difficult: pre-existing abnormalities may be read as new. Access to a previous ECG allows identification of changes but the patient has to present to his/her local emergency department and the notes have to be available. This is not often the case.

The authors suggest that the patient is given a credit card-sized copy of his/her own ECG. This will provide a comparison for the health professional to determine whether thrombolysis is appropriate or not. A compact ECG is easy to produce: the ECG can be scanned using a flatbed scanner and then converted into a credit card-sized printout. This can be sealed in a laminated pouch. The opposite side shows the patient details and ECG interpretation. The size (72 mm x 47 mm) means that it will fit easily into a wallet or purse.

In the presentation of acute chest pain, this copy of an ECG could allow patients themselves, as well as health professionals, to assist in the delivery of rapid and appropriate treatment.

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