This method is ideally suited to standard hemi-arthroplasty implants. We recognise the potential for canal compromise with poorly placed wires which may affect implant fixation. However, in cemented implants a wire which breaches the canal will be surrounded by cement mantle and its effect will be negligible. With uncemented implants, which rely on metaphyseal fixation for primary and secondary stability, the presence of the wire within the canal may cause micromotion and compromise osseointegration.

Reference

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The use of over-penetrated radiographs for assessment of chronic osteomyelitis in children

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BACKGROUND

Childhood chronic osteomyelitis is a condition that remains prevalent in the developing world. There are several imaging techniques that are useful in the investigation and management of chronic osteomyelitis such as plain radiographs, scintigraphy (bone, leukocyte and gallium), computer tomography, magnetic resonance imaging and positron emission tomography. Comparison between these has shown that some of the more sophisticated imaging techniques have some advantages.¹ However, plain radiographs are the only means of imaging that are generally available in the developing world, where this condition is most common.

TECHNIQUE

We have found that deliberately over-penetrated radiographs often reveal sequestra and abscesses that are not seen on radiographs taken at a standard exposure. This is because they are masked by the thick involucrum, which is frequently sclerotic. The radiographs in Figures 1 and 2 show anterior-posterior radiographs of the right tibia and fibula of a child with chronic haematogenous osteomyelitis. Figure 1 shows a

Figure 1 Anterior-posterior radiograph of the tibia of a boy with chronic haematogenous osteomyelitis taken at a standard exposure.

Figure 2 The same tibia seen on an overexposed radiograph: the sequestra are visualised much more clearly.

radiograph taken at a standard exposure (12 mAs/84 kVp) and Figure 2 deliberately overexposed (12 mAs/88 kVp). The sequestrae are much more clearly seen in Figure 2.

DISCUSSION

In planning the surgical management of patients with chronic osteomyelitis being able to visualise sequestrae and abscesses is of great importance. We now request over-penetrated radiographs as standard in all cases of chronic osteomyelitis.

Reference

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A simple technique to achieve adequate tumescent anaesthesia for endovenous laser ablation (EVLA) of the great saphenous vein

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BACKGROUND

EVLA is an effective alternative to stripping of the great saphenous vein (GSV).^{1,2} It utilises local tumescent anaesthesia allowing immediate ambulation and rapid discharge. The safety, comfort and efficacy of EVLA are highly dependent upon the accurate placement of large volumes of tumescent fluid in the perivenous plane.^{1,2} We present a simple technique to achieve this aim.

TECHNIQUE

The GSV is cannulated and a catheter is positioned proximal to the saphenofemoral junction. Administration of tumescent anaesthetic (around 200 ml of 0.1% lidocaine per leg) is then commenced. Initially, the vein/catheter complex is imaged in the transverse plane with the vein positioned centrally. Every 5 cm along the course of the vein, a mark is made next to the outer side of the ultrasound transducer (Fig. 1). At each mark, local anaesthetic is injected (size 25-G needle; Fig. 2). Tumescent fluid is then administered painlessly under ultrasound guidance (10–20 ml at each site) using a 21-G needle (Fig. 3). To ensure accurate placement of fluid, the path of the needle is followed on the screen, and the fluid is injected once the needle tip penetrates the saphenous fascia. To visualise the advancing needle, it must be inserted centrally along the line of the ultrasound beam. Accurate and adequate placement of fluid is

Figure 1 A skin mark is made to the side of the transducer.

Figure 2 Marks on leg along the course of the great saphenous vein and injection of 1% lidocaine.

Figure 3 Infiltration of tumescent fluid under ultrasound guidance.

Figure 4 Ultrasound image of 21-G needle tip (vertical arrow) and tumescent 'halo' (horizontal arrow).