Figure 3 Photograph of thoracic spine with electrocardiography markers placed on the lateral thoracic walls at the correct level

correct level in the thoracic spine. Once identified, an adhesive electrocardiography (ECG) marker is placed on each lateral thoracic wall to overlie the vertebra on the lateral radiograph. When the first adhesive marker has been placed, the second marker is placed on the contralateral side to exactly overlap the first marker when viewed with the image intensifier and the image is saved. Intraoperatively, the correct level can be found quickly and confidently with minimal

Figure 4 Lateral image intensifier image taken intraoperatively. Once the thoracic spine was exposed, the image intensifier was used to recreate the preoperative image to ensure that the correct level had been identified.

radiation by identifying the point at which the ECG markers exactly line up on the image intensifier. The technique is demonstrated in Figures 1–4.

DISCUSSION

To our knowledge, this simple technique has never been reported in the literature. Based on our experience, we believe this technique confirms to both surgeon and imaging technician that true-lateral and correct-level imaging are employed throughout the procedure while enhancing safety by reducing operative time and radiation exposure.

References

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Accurate screw arthrodesis of the distal interphalangeal joint

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BACKGROUND

Arthrodesis of the distal interphalangeal joint (DIPJ) is often performed to treat pain, deformity and instability associated with both osteoarthritis and rheumatoid arthritis. Headless compression screw fixation is a recognised technique, and the compression and rigid fixation achieved are thought to influence fusion rates as well as time to union.¹ Final screw position is dependent on initial K-wire placement. A 'double ended' K-wire technique enabling intra-articular antegrade and then extra-articular retrograde positioning across the joint line would be most accurate. Unfortunately, the current wires on the 2.4mm headless compression screw tray (Synthes, West Chester, PA, US) are 'single ended'. We offer a modified double ended technique using a single ended wire to improve the quality of screw position and subsequent fixation achieved.

TECHNIQUE

Following clearance of the DIPJ articular cartilage, the single ended K-wire is passed from the intra-articular surface centrally antegrade up the distal phalanx, through the tip of the finger. The wire is passed fully through the distal phalanx. This same wire is then loaded 'backwards' into the K-wire driver and passed blunt end first antegrade up the pre-existing tract in the distal phalanx (Fig 1). Once the sharp end is sitting in the joint space, the finger can be accurately positioned before the K-wire is driven retrograde across the DIPJ and into the centre of the middle phalanx. The headless compression screw can then be sited according to the standard technique.

Figure 1 Photograph of 'backwards' antegrade placement of the K-wire into the distal phalanx

Figure 2 Anteroposterior and lateral radiography of the final position of the 2.4mm headless compression screw, achieving arthrodesis of the distal interphalangeal joint

DISCUSSION

We feel this novel modification to the current technique ensures best practice, maximises chances for optimal screw position and remains cost effective by avoiding the opening of additional equipment.

Reference

1. Brutus JP, Palmer AK, Mosher JF *et al.* Use of headless compressive screw for distal interphalangeal joint arthrodesis in digits: clinical outcome and review of complications. *J Hand Surg Am* 2006; **31**: 85–89.

Presurgical preparation using static electricity

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Effective removal of the patient's excess body hair is essential prior to laparotomy. Electric clippers are now commonplace and sticky tape is often used to remove the clippings; this can be awkward and time consuming. Clippings can be removed using static electricity formed between the layers of a disposable plastic apron, by opening it and then rubbing over the freshly clipped surgical field. Use of static electricity has been documented in orthopedic surgery.¹ We advocate its use also at other body sites. Static electricity has the advantage of dryly removing even tiny fragments, which may not be reached adequately by other means.

Reference

1. Bebbington A, Hardy J. Shaving with the aid of static electricity. *Ann R Coll Surg Engl* 2004; **86**: 226.

Figure 1 Removing hair clippings using static electricity