Figure 1 Finger trap applied to the finger for traction

Figure 2 Fluoroscopy image before traction

ligaments. Intra-articular injections can be given inaccurately if sufficient precautions are not taken.¹ Distraction of the joint by finger trap is a useful method to create space for injections. It may be possible to apply excessive traction: use of fluoroscopy would avoid this happening.

We have used this technique in 12 joints in 7 different patients. Only once did we fail to inject into the joint. We recommend the use of finger traps for distraction of small joints of the hand for injection (under fluoroscopic guidance) and not to over distract them.

Reference

1. Jones A, Regan M, Ledingham J *et al*. Importance of placement of intra-articular steroid injections. *BMJ* 1993; **307**: 1,329–1,330.

Figure 3 Fluoroscopy image showing needle in the proximal interphalangeal joint after traction

Novel intraoperative applications for the metal suction cannula

D Pettitt, SM Anandan, MK Kulkarni
Frimley Health NHS Trust, UK

CORRESPONDENCE TO

Suresh Anandan, E: suresh.anandan@fhft.nhs.uk
doi 10.1308/rcsann.2016.0109

BACKGROUND

The Suzuki frame, as described by Suzuki *et al* in 1994, is a skeletal traction system for comminuted intra-articular fractures and fracture dislocations of the proximal interphalangeal joint of the hand (Fig 1).¹ In order to fabricate such a frame, hand surgeons often use two needle holders to firmly hold the K-wires, and subsequently use one to form a series of 90° bends and turns. This method can be cumbersome, resulting in suboptimal angulation, and leaves the sharp K-wire ends exposed throughout the procedure.

TECHNIQUE

The metal suction cannula, which is readily available in standard instrument sets, is passed over the K-wire to the proposed point of angulation and bent (Fig 2). Using the principle of levers, the longer the distance from the fulcrum compared with the grip of a needle holder, the greater the moment of force and the better controlled the bend.

Figure 1 Suzuki frame

Figure 2 Metal cannula passed over K-wire

Figure 3 Metal stilette of suction cannula

DISCUSSION

The metal suction cannula thus simplifies the procedure, saving time and preventing needlestick injuries. The metal stilette of the suction cannula (Fig 3) can also be used as an intraoperative aid in hand surgery.

Evgeniou *et al* have described a rectangular metal frame to identify the bone graft harvest position on the distal radius using a straight 0.9mm K-wire bent to the desired size.² The advantage of the suction stilette is that it is preformed; the ends are blunt and smooth, with no risk of sustaining a sharps injury.

References

1. Suzuki Y, Matsunaga T, Sato S, Yokoi T. The pins and rubbers traction system for treatment of comminuted intraarticular fractures and fracture-dislocations in the hand. *J Hand Surg Br* 1994; **19**: 98–107.
2. Evgeniou E, Dimitriadis PA, Kulkarni M. Metal frame for identification of bone graft harvest position. *Ann R Coll Surg Engl* 2014; **96**: 315.

Syringe barrels as radiolucent drill sleeves during fixation of intramedullary nails for long-bone fractures

ERB Stirling, MS Patel, SC Williams

University Hospitals of Leicester NHS Trust, Leicester, UK

CORRESPONDENCE TO

Mohammed Patel, E: shaqs@doctors.org.uk
doi 10.1308/rcsann.2016.0121

BACKGROUND

Drill sleeves used for insertion of free-hand locking screws of intramedullary nails or external fixator pins are radiopaque, thereby making visualisation of trajectory challenging.

Figure 1 A 1ml syringe