

When fracture reduction is radiographically confirmed, the K-wires can be sequentially replaced with low-profile headed 1.5-mm screws through stab incisions, which need only to be big enough to pass the screw heads (Fig 3). There is no need to drill, as the track of the K-wires is adequate.

DISCUSSION

This method is simple to use, provides more compression across the fracture than K-wires alone, with minimal soft tissue damage or periosteal stripping, potentially resulting in a lower risk of infection. The technique provides stable fixation and enables early active mobilisation, reducing stiffness and potentially resulting in improved functional outcome.

References

1. Onishi T, Omokawa S, Shimizu T *et al*. Predictors of postoperative finger stiffness in unstable proximal phalangeal fractures. *Plast Reconstr Surg Glob Open* 2015; **3(6)**: e431.
2. Belsky MR, Eaton RG, Lane LB. Closed reduction and internal fixation of proximal phalangeal fractures. *J Hand Surg* 1984; **9A**: 725–729.
3. Rafique A, Ghani S, Sadiq M, Siddiqui IA. Kirschner wire pin tract infection rates between percutaneous and buried wires in treating metacarpal and phalangeal fractures. *J Coll Physicians Surg Pak* 2006; **16(8)**: 518–520.

Tension band wire stabilisation: an aid to femoral intramedullary nail fixation

A Hannah, A Bruce

Trauma and Orthopaedic department, Doncaster Royal Infirmary, Doncaster and Bassetlaw Hospitals NHS Foundation Trust, Doncaster, UK

CORRESPONDENCE TO

Andrew Hannah, E: Andrew.hannah@doctors.org.uk
doi 10.1308/rcsann.2017.0207

BACKGROUND

Tension band wire fixation techniques for fractures are well described in the literature and widely employed in clinical practice. We describe a technique that uses tension band principles to aid in maintaining the reduction of transverse femoral fractures, thereby simplifying the definitive intramedullary fixation.

TECHNIQUE

Using a direct lateral approach as for an open reduction of the fracture, two 4.5 mm unicortical screws are inserted, one either side of the fracture site. A Dall-Miles cable or equivalent can then be applied and tensioned to reduce and hold the fracture reduced while intramedullary nail fixation is undertaken (Fig 1). This construct can then be left in or removed at the surgeon's discretion.

DISCUSSION

This is a very simple and powerful technique for providing temporary femoral fracture stabilisation enabling a much simpler intramedullary nail fixation in potentially difficult cases. We have found this technique particularly useful in non-union cases that required a shortening osteotomy.



Figure 1

Biopsy of ureteric lesions using a semi-rigid ureteroscope through a ureteric access sheath

RK Smith¹, P Smith^{1,2}, S Pridgeon^{1,2,3}

¹Department of Surgery, Cairns Hospital, Cairns, Queensland, Australia

²Northern Urology, Cairns, Queensland, Australia

³College of Medicine and Dentistry, James Cook University, Cairns, Queensland, Australia

CORRESPONDENCE TO

Ross K Smith, E: ross.smith@my.jcu.edu.au
doi 10.1308/rcsann.2017.0208

BACKGROUND

Obtaining a tissue diagnosis from a ureteric lesion can be technically difficult. Inadequate tissue sampling with biopsy forceps is common and can delay diagnosis and treatment. The use of backloading biopsy forceps allows larger tissue samples to be obtained when compared with traditional biopsy forceps, which are limited by the diameter of the ureteroscopic working channel. However, backloaded biopsy forceps may reduce vision and hinder safe access of the ureter. The use of an access sheath can allow multiple passes to the ureteric lesion and can improve vision.

TECHNIQUE

Retrograde study and diagnostic ureteroscopy to assess a ureteric lesion is undertaken. A 12/14 Fr ureteric access sheath over a hydrophilic guidewire is then placed to the level of the lesion under fluoroscopic guidance. A Cook Medical's BIGopsy® backloading biopsy forceps is then used through a semi-rigid ureteroscope. The semi-rigid

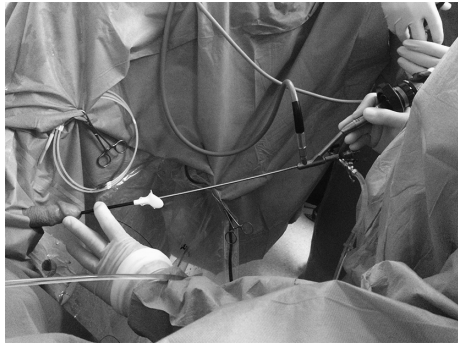


Figure 1 Semi-rigid ureteroscope passed through ureteric access sheath

ureteroscope is carefully passed through the access sheath (Fig 1) to the lesion multiple times to obtain diagnostic biopsies (Fig 2).

DISCUSSION

Upper tract urothelial carcinomas comprise 5% of all urothelial malignancies. Ureteric anatomy may limit access to obtain an adequate biopsy from ureteric lesions with conventional instrumentation. This technique allows multiple passes of a semi-rigid scope with a backloaded biopsy forcep in situ safely to the level of the lesion. The use of an access sheath also allows improved flow, which would otherwise significantly be reduced when using a backloaded ureteroscope. Multiple biopsies can be taken with good visualisation of the lesion. This method may facilitate the diagnosis of ureteric lesions.



Figure 2 Backloaded biopsy forcep allowing multiple passes to level of lesion