Assisting the positioning of the proximal portion of percutaneous anterolateral distal tibial periarticular plates

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BACKGROUND

Minimally invasive percutaneous plating techniques are increasingly common in the management of periarticular fractures of the lower limb.¹⁻⁴ Either a medial or anterolateral precontoured plate can be used in this way with distal tibial fractures. With anterolateral plates, it is common to find on sliding the plate that the proximal tip of the plate has a tendency to slip posteriorly to the tibia. The foot often

pushes the distal part of the plate anteriorly on sliding up, compounding the issue.

TECHNIQUE

We describe a new technique for avoiding this situation. A leading suture is tied to the proximal portion of the plate (Fig 1). A suture passer

Figure 1 Lead suture tied to proximal portion of plate

Figure 2 Suture passer fed through proximal percutaneous stab wounds

Figure 3 Lead suture captured

Figure 4 Plate advanced and suture pulled to keep plate on shaft of tibia

is fed through the proximal incision, to emerge from the distal wound (Fig 2). The lead suture is captured (Fig 3) and the plate advanced in the standard fashion. The lead suture allows for the proximal tip of the plate to be pulled anteriorly and sit perfectly on the lateral border of the tibia (Fig 4). The suture is then cut once the plate is secured.

DISCUSSION

We have found this an extremely useful technique and apply it by default in all procedures requiring an anterolateral plating of the distal tibia. It reduces operating time and is cheap, reproducible and safe.

References

1. Aksekili MA, Celik I, Arslan AK *et al*. The results of minimally invasive percutaneous plate osteosynthesis (MIPPO) in distal and diaphyseal tibial fractures. *Acta Orthop Traumatol Turc* 2012; **46**: 161–167.
2. Ghera S, Santori FS, Calderaro M, Giorgini TL. Minimally invasive plate osteosynthesis in distal tibial fractures: pitfalls and surgical guidelines. *Orthopedics* 2004; **27**: 903–905.
3. Sohn OJ, Kang DH. Staged protocol in treatment of open distal tibia fracture: using lateral MIPO. *Clin Orthop Surg* 2011; **3**: 69–76.
4. Perren SM. The technology of minimally invasive percutaneous osteosynthesis (MIPO). *Injury* 2002; **33 Suppl 1**: VI–VII.

Simple, cheap and non-invasive intraoperative traction of the femur in amputees

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Several methods of traction of proximal femoral fractures in amputees have been described previously. Steinman pin traction carries the risk

of infection and soft tissue destruction. Traction using a hand trap requires added expense and it is not always readily available. We describe a method of traction using standard equipment found in the orthopaedic trauma theatre during lower limb traction.

The telescopic traction bar is shortened maximally. The footplate and shoe are turned upside down. The flexed amputated knee is then secured in the shoe as would normally be a foot (Fig 1). Rotation, traction, abduction and adduction manoeuvres are performed as normal.

Figure 1 Intraoperative traction of the femur in an amputee