Figure 2 Lateral view of the proximal femur demonstrating the reduction of the deformity with a ballspike retractor and an underarm crutch

TECHNIQUE

First, correct the shortening with a traction table. A ballspike reduction tool is introduced under radiographic guidance through a percutaneous anterolateral incision, lateral and inferior to the anterior superior iliac spine (to avoid the lateral cutaneous nerve of the thigh). This is then used to depress the proximal part of the fracture while a crutch placed under the leg at the distal fracture site provides a counteracting force (Fig 2). This allows the guidewire to be passed across the fracture site

Figure 3 Intraoperative imaging of successful closed reduction of the left hip with ballspike retractor and underarm crutch with anteroposterior (A) and lateral (B) views prior to intramedullary nailing and anteroposterior (C) and lateral (D) views after nailing

and enables the procedure to be completed without need for formal open reduction. Care must be taken not to leave the crutch in place for an extended period of time as this risks compressing the sciatic nerve.

DISCUSSION

Open reduction of this fracture type is well documented and produces satisfactory results.² The technique described can reduce surgical trauma and operative time without compromising the fracture reduction (Fig 3).

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Use of anterior cruciate ligament guide in Lisfranc injury fixation

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BACKGROUND

Lisfranc fracture dislocation fixation is technically demanding surgery. After obtaining anatomic reduction, a screw is inserted in line with the Lisfranc ligament, which runs obliquely at an angle of 50–60° from the

Figure 1 Placement of the anterior cruciate ligament guide

medial cuneiform to the base of the second metatarsal. Ideal placement of the screw is pivotal to maintaining reduction and achieving a good outcome. We describe a technique that enables the surgeon to accomplish precise, reproducible screw placement using an anterior cruciate ligament (ACL) guide.

TECHNIQUE

The ACL guide consists of a pin sleeve, marking hook and variable angle jig. The angle on the jig varies from 40° to 70°. We recommend that the ACL guide is placed as shown in Figure 1, confirming the position by image intensifier. The guidewire can now be inserted, overdrilled and a screw placed.

DISCUSSION

The second metatarsal base is considered the 'keystone' of the Lisfranc articulation.¹ Anatomic reduction and stable fixation are the goals of surgery. It is imperative that the screw is placed in the desired position in one go as multiple tries could 'pepper pot' the second metatarsal cortex, causing fracture and compromising fixation. The technique described is not original but may help surgeons perform this difficult operation quickly, safely and reliably.

Reference

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Soft plastic snugger to assist seating of prosthetic aortic valve

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Accurate positioning of a prosthetic aortic valve, in the native aortic annulus, is essential to prevent paravalvular leak. However, it may be difficult to achieve good apposition between a rigid prosthetic valve and deeply scalloped annulus. Ubiquitous to cardiac operating sets, a soft plastic snugger can be used to secure the middle suture in each sinus. This flattens and approximates the annulus while sutures are tied from each commissure towards the snugger, ensuring a good seal (Fig 1). Finally, the snugger is removed and the last suture tied. This is a safe, affordable and reproducible method of accurately seating a prosthetic valve.

Figure 1 Soft plastic snugger to secure sutures in non-coronary cusp while tying valve into place