

reduction, as demonstrated in their use in proximal tibial fractures.<sup>2</sup> The technique for use with femoral nails has not been reported. We have described a simple, safe and inexpensive method for correction of poor positioning of blocking guidewires and nails that can prevent subsequent cortical penetration. To date, we have not witnessed tension-side femoral fractures using this technique.

**References**

1. Bazylewicz DB, Egol KA, Koval KJ. Cortical encroachment after cephalomedullary nailing of the proximal femur: evaluation of a more anatomic radius of curvature. *J Orthop Trauma* 2013; **27**: 303–307.
2. Stedtfeld HW, Mittlmeier T, Landgraf P, Ewert A. The logic and clinical applications of blocking screws. *J Bone Joint Surg Am* 2004; **86-A (Suppl 2)**: 17–25.

**Implantation of the Cochlear Baha® 4 Attract system through a linear incision**

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**BACKGROUND**

Increasingly, bone conduction ‘osseointegrated’ titanium implants coupled with implantable magnets are being offered to suitable patients. The established procedure of implantation of these devices involves a semicircular incision behind the ear followed by raising of a flap of soft tissue. Here, we describe a simplified incision that has been used in >30 patients with no associated complications.

**TECHNIQUE**

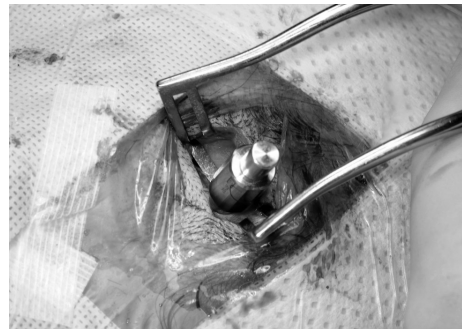
The incision site is marked in a conventional manner (Fig 1). An oblique line to mark the incision is drawn through the centre of the marked circle. After measuring skin thickness, a linear incision is made down to the periosteum and the wound undermined. An implant template is placed (Fig 2). Any bony prominences that have



**Figure 1** Marking of the incision site



**Figure 2** Placement of an implant template



**Figure 3** The implant is placed in a conventional manner followed by the bone bed indicator



**Figure 4** Placement of the implant magnet

been palpated are used as the implant site. The implant is placed in a conventional manner followed by the bone bed indicator (Fig 3) then the implant magnet (Fig 4). The magnet is secured and the wound closed (Fig 5).



Figure 5 The wound is closed

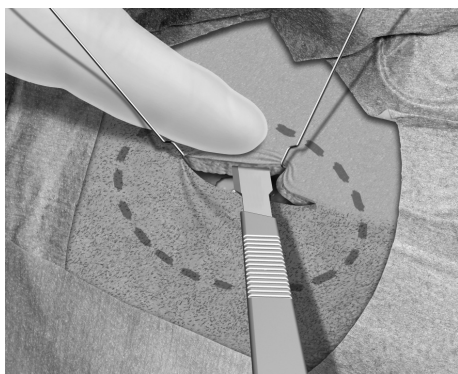


Figure 6 Skin thinning



Figure 1 Irrigation set

High pressure pulse lavage has been contraindicated as there is the potential to push the contaminant further into the wound.<sup>2</sup> Using a giving set attached to an elevated fluid bag does not provide the required pressure and takes a long time to wash out the wound effectively. We describe a simple technique that allows for thorough, efficient wound washout.

**DISCUSSION**

The technique described here has three advantages over the conventional technique: (i) improved cosmetic effect (thanks to avoidance of the abnormal hair growth that occurs along the line of the semicircular incision); (ii) easier skin thinning (Fig 6); (iii) shorter operative time.

**TECHNIQUE**

A warmed 3l saline bag is removed from its wrapping in a sterile fashion and cut at the drip insertion site. A sterile Yankauer sucker is attached to the end of the bag (Fig 1). The tip can now be used to direct the irrigation flow into the desired portions of the wound. By varying the pressure on the bag with one hand, the pressure of the stream can be varied. Use of a broad Mayo bag under the irrigated limb enables the washout fluid to be collected easily and stops contamination of the sterile operating field.

**DISCUSSION**

In our experience, this technique is very effective at washing out open fractures and the washout can be performed in under five minutes. This form of wound washout can be extended for use well beyond open fracture management and is very easy to set up as both components are universally available at all hospitals.

**Effective irrigation of contaminated open fractures**

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**BACKGROUND**

The sound washout and debridement of an open fracture is fundamental to reducing the incidence of infection in open fracture management.<sup>1</sup>

**References**

1. British Orthopaedic Association; British Association of Plastic, Reconstructive and Aesthetic Surgeons. *BOAST 4: The Management of Severe Open Lower Limb Fractures*. London: BOA; 2009.
2. Nanchahal J, Nayagam S, Khan U *et al*. *Standards for the Management of Open Fractures of the Lower Limb*. London: BAPRAS; 2009.