Figure 4 The three-point moulding technique.

To demonstrate the reduction, the sponge is then slid so that the edges match and then the sponge ends reduced. The fracture is then reduced by forceful volar flexion whilst maintaining the traction against the intact material 'periosteum' (Fig. 3).

The three-point moulding technique of plaster cast immobilisation is represented in our model by the three points that maintain reduction against the intact material (Fig. 4).

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A 'Seldinger' method to facilitate accurate placement of an end cap following femoral nailing

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BACKGROUND

End capping of intramedullary nails stops bony in-growth of tissue. We describe a method to facilitate reliable insertion by using a Seldinger technique to maintain access to the upper part of the nail. The equipment needed is already provided in the instrumentation set supplied by the manufacturers of Synthes femoral nails.

TECHNIQUE

The connecting screw of the insertion handle is removed from the nail, leaving the handle supported and engaged in the top end of

Figure 1 Guide wire inserted through disconnected insertion handle.

the nail. A guide wire is inserted through the insertion handle into the upper end of the nail (Fig. 1). The guide wire is retained whilst the insertion handle is extracted from the wound (Fig. 2). The protection sleeve and cannulated trocar for the nail are then advanced along the guide wire down to the nail entry portal. The guide wire and cannulated trocar are removed, leaving the outer sleeve accurately placed over the proximal end of the nail (Fig. 3). The appropriate size of end cap is inserted into the nail through the protection sleeve of the cannulated trocar directly into the nail (Fig. 4).

Figure 2 Guide wire retained in nail after removal of insertion handle.

Figure 3 Protection sleeve and trocar for nail slid along guide wire to nail.

DISCUSSION

In 1953, Seldinger first described a technique for percutaneous cannulation of a blood vessels. This was achieved by placing a guide wire through a hollow needle; the blood vessel lumen was then accessed along the guide wire. We believe that end capping of intramedullary nails can be reliably achieved using a combination of our described 'Seldinger' technique using a guide wire and trocar and conventional image intensification.

Figure 4 End cap inserted into nail through protection sleeve of cannulated trocar.

Arthroscopic removal of loose bodies – a useful technique

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BACKGROUND

We describe a simple and useful technique for removal of loose bodies during arthroscopy.

TECHNIQUE

We use standard antero-lateral, antero-medial and supero-lateral arthroscopic portals. The technique is applicable to both pump-assisted and gravity-assisted irrigation. The key to this new technique is reversing the direction of irrigation flow.

Figure 1 Line diagram of the knee to illustrate the direction of flow of the irrigation fluid used in this technique.