Technical tip in dynamic hip screw plate insertion

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Dynamic hip screw procedures are performed commonly by orthopaedic registrars during their training. After successful screw insertion, trainees can face the challenge of sliding the plate on the screw without impinging against the bone, and the clearing of skin and soft tissues distally. We describe a technical tip where, after the screw is inserted to the desired length, the screw is turned a quarter turn anti-clockwise for a right procedure and clockwise for a left procedure (always towards the patient's head). The plate is then inserted vertically but only partially, with the distal tip facing up. The plate together with the screw is turned so the plate is parallel to the shaft. During this manoeuvre, the skin and soft tissue can easily be retracted distally. The barrel of the plate can then be fully inserted.

A versatile hip spacer for first stage revision in prosthetic joint infection

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BACKGROUND

Prosthetic joint infection is managed successfully using a two-stage procedure.¹ Commonly, a cement spacer is implanted during the first stage.²

TECHNIQUE

Following debridement and removal of all prosthetic material, the femoral canal is reamed to 14mm. A 14-hole 3.5mm standard AO plate (DePuy Synthes, Leeds, UK) is bent to mimic the natural femoral neck shaft angle and offset. The threaded tip of a Gamma[®] nail (Stryker, Newbury, UK) lag screw guidewire is bent and the wire cut to the desired length. (Longer stems require two wires.)

40g of Palacos[®] cement (Heraeus, Wehrheim, Germany) is pressurised into a Thin-Flex venous cannula (Edwards, Newbury, UK). The plate is inserted proximally and the guidewire is inserted distally, ensuring the wire passes through a hole in the apex of the bent plate. A mix of cement is applied around the remainder of the plate. A femoral head is fashioned using the inner surface of an acetabular hemispherical reamer (with no internal crossbar), 2mm greater than the last reamer used in the native acetabulum and finished with a reamer 4mm larger, both turned anticlockwise (Fig 1). The plastic tubing is

Figure 1 Completed spacer

removed. The spacer is held in the patient with cement at the level of the femoral neck.

DISCUSSION

The addition of the trauma plate strengthens the construct. We have had no implant failures. We recommend placing the bent threaded guidewire tip distally to allow for the easy removal of the whole implant.

References

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A simple purse string closure to maintain breast projection after central excision

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BACKGROUND

Central excision for cancers and benign problems involving or behind the nipple–areola complex (NAC) can lead to loss of breast projection. Tissue transfer and mammoplasty techniques can be used to correct this in larger breasts. We present a simple method that is particularly useful in smaller breasts.

TECHNIQUE

Following central breast excision, a circumferential purse string suture is first placed deeply around the base of the defect, taking

Figure 1 Second suture being tied

Figure 2 Closure of overlying skin using an absorbable subcuticular stitch

adequate bites of tissue to prevent 'cutting out'. Once this suture has been pulled tight and knotted, a second identical, superficial suture is placed and tied (Fig 1). Our preferred suture material has been 3/0 Vicryl® (Ethicon, Somerville, NJ, US). The overlying skin can then be mobilised and closed in the usual way, in this case using an absorbable subcuticular stitch (Fig 2).

DISCUSSION

Purse string closure is a recognised technique for closing fairly large, rounded skin defects, particularly after wide excision for melanoma.^{1,2} It has also been described for skin closure after central breast excision ('NACectomy'). Our preference is to use this method

centrally to close the underlying breast parenchyma so as to restore breast projection and contour. Although particularly advantageous after central excision, the method can be useful in closing defects elsewhere in the breast with relatively little tethering or distortion.

References

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