Figure 1 Direct transpectoral approach for level III axillary lymph node clearance. a = thoracoacromial vein + artery (pectoral branch); b = medial edge of pectoralis minor; c = pectoralis major; d = axillary vein; e = Halsted's ligament; f = first rib

Figure 1 Dental panoramic tomography showing left condylar neck and coronoid fracture

Figure 2 Orthodontic appliance with immediately placed stainless steel archwires contoured to the labial aspects of the teeth and resting passively, allowing immediate placement of intermaxillary elastics

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A new non-surgical technique for management of high condylar neck fractures

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BACKGROUND

A closed reduction technique is described, which offers an alternative to arch bars and avoids dental impressions.

TECHNIQUE

A closed reduction technique for a condylar fracture (Fig 1) may be carried out using orthodontic brackets, stainless steel archwires and elastics. A rigid 0.018" stainless steel archwire is customised to the

upper and lower dental arches at the chairside. The archwire is used as a guide to bracket placement. Wire bends are placed as required to ensure the archwire lies passively against the teeth. Self-ligating brackets for molar teeth are used, thereby allowing passive placement of the archwire. Kobayashi hooks are placed around the premolar teeth to allow immediate placement of intermaxillary elastics (Fig 2). The patient should be instructed to wear elastics full time for one week to correct any mandibular displacement and to gradually reduce elastic wear over a six-week period.

DISCUSSION

This type of fracture would commonly be treated with placement of arch bars, perhaps requiring general anaesthesia. However, limited mouth opening and discomfort can make impressions and arch bar placement difficult. Direct bonding of brackets and immediate placement of stainless steel archwires and intermaxillary elastics avoids the need for general anaesthesia and dental impressions. As opposed to initial placement of brackets on selected teeth and risking overeruption when placing intermaxillary elastics,¹ this technique involves immediate placement of stainless steel archwires contoured to the labial aspects of the teeth, resting passively and not causing unwanted tooth

movement. Immediate intermaxillary elastics are used to hold the patient's malocclusion in a non-displaced position and permit uneventful healing.

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Use of the Explant® system to remove Trabecular Metal™ augments in revision hip surgery

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None of the authors have any commercial interest in any of the products described in this technical note.

BACKGROUND

Revision hip surgery can be a complex undertaking. A recent option for reconstruction of the acetabulum with major bone loss is the use of porous metal augments around a hemispherical shell such as the Trabecular Metal™ modular acetabular system (Zimmer, Warsaw, IN, US). These implants have demonstrated excellent bone ingrowth and incorporation into pelvic bone stock.^{1,2} Nevertheless, this presents a technical problem should these implants need to be revised, for example in the presence of deep seated prosthetic infection. The Explant® acetabular cup removal system (Zimmer) was designed to remove uncemented hemispherical acetabular shells. We describe the use of the Explant® for the removal of porous metal periacetabular augments.

Figure 1 Explant® removing Trabecular Metal™

Figure 2 Acetabular augment removed with minimal bone loss

Figure 3 Minimal acetabular bone loss

TECHNIQUE

The shell can be removed in the conventional manner using the Explant®. The same device can then be used to remove the periacetabular augments. Initially, the small blade is used on the Explant®, followed by the larger blade. However, the Explant® is impacted circumferentially about the augments with a mallet rather than in the traditional rotational manner (Fig 1). This overcomes the problem of the augments not possessing a corresponding internal diameter. The Trabecular Metal™ augments can then be lifted easily out of the acetabulum with minimal bone loss (Figs 2 and 3).

DISCUSSION

This is a proposed further use for the Explant® system in what is becoming an increasingly encountered prosthesis for the revision surgeon.