Figure 2 Closure of lateral open bites within eight weeks

TECHNIQUE

A modified approach is to place a mandibular 0.017" × 0.025" flexible nickel-titanium archwire in the immediate presurgical period. Kobayashi ligatures may be placed on the brackets to facilitate intraoperative bimaxillary fixation. The splint is removed towards the end of the surgical procedure and the occlusion is checked for a solid three-point landing. Light bilateral box elastics are placed intraoperatively or directly after surgery, which will begin active extrusion immediately (Figs 1 and 2).

DISCUSSION

This modified technique reduces both treatment time and patient discomfort.

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Technique to test flexor hallucis longus after Akin osteotomy

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BACKGROUND

An Akin osteotomy is commonly performed to correct hallux valgus interphalangeus. The flexor hallucis longus (FHL) tendon passing plantar to the proximal phalanx is at risk when performing this osteotomy. We describe a method of assessing the integrity of the FHL intraoperatively.

TECHNIQUE

After the Akin osteotomy has been stabilised, the foot is dorsiflexed passively while observing whether there is reciprocal toe plantarflexion.

The presence of this tenodesis effect of the FHL suggests integrity. Conversely, if this is not seen, further exploration of the FHL is indicated.

DISCUSSION

When lacerations occur distal to the knot of Henry, the FHL is unable to function as a flexor.¹ It also has a role in maintaining the medial longitudinal arch of the foot. Failure to reconstruct acutely may result in unbalanced extension of the toe and development of a flatfoot deformity.²

Recognition of a FHL injury intraoperatively is not obvious and this is often picked up later in the rehabilitation period. We have described a simple intraoperative test to help identify a possible injury to the FHL, which would lead to immediate reconstruction if present and therefore reduced morbidity.

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Novel method for retrieval of a well-fixed fractured femoral component after total hip replacement

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BACKGROUND

Fractures of femoral components are complications of revision total hip arthroplasty.¹ Prevalence of such complications is 0.23–11%, but the consequences can be devastating.² Extraction of fractured femoral components is a demanding undertaking that can be detrimental to remaining host bone.

Several techniques have been described to address this complex issue before revision: (i) drilling of the exposed part of the femoral stem and attachment of a threaded extraction device;³ (ii) surface undercutting with an extraction device; (iii) femoral trephine methods; (iv) creation of a femoral cortical window; (v) extended femoral osteotomy;⁴ extraction by retrograde nail impaction.⁵ Here, we describe a technique that we employ in revisions of failed cementless, extensively porous, coated femoral components that have fractured at the neckstem interface (Fig 1).

TECHNIQUE

The proximal femoral component is visualised. An orthopaedic burr and a femoral osteotome are used to surround the component. Using

Figure 1 Anteroposterior radiograph of the pelvis showing a fractured left femoral stem at the neck-stem junction

DISCUSSION

In revision hip arthroplasty, unpredictable prosthetic failures require innovation to tackle the unique problems encountered. Our method is a safe and efficient alternative for retrieving femoral components and is not associated with complications.

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Figure 2 Engagement of the distal end of a universal slap hammer in the recess created by the Midas Rex® MR7 pneumatic drill

a Midas Rex® MR7 pneumatic drill (Medtronic, Minneapolis, MN, USA) with its metal-cutting attachment, a circular recess is created in the shoulder of the femoral component. This strategy facilitates application of the distal end of a universal slap hammer (Fig 2). The component is retrieved with no associated bone loss, thereby negating the need for a femoral osteotomy.

Protection of soft tissue and avoidance of inadvertent neurovascular injury in repair of the distal biceps

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BACKGROUND

Rupture of the distal biceps tendon is not uncommon in middle-aged males during eccentric contraction of the biceps. Early surgical repair

Figure 1 Nasal specula used in the surgical technique described here. Specula are of standard design with a ratchet mechanism that can hold the blades in a certain position.