Removing large diameter acetabular cups with the Explant Acetabular Cup Removal System: A technique to maintain the centre of rotation

P Nesbitt, D Knowles

Trauma and Orthopaedics, Royal Lancaster Infirmary, UK

CORRESPONDENCE TO

Paul Nesbitt, E: paulnesbitt@doctors.org.uk
doi 10.1308/rcsann.2016.0090

Removal of bonded, uncemented acetabular cups is challenging for orthopaedic surgeons, as excessive bone loss or acetabular fracture can compromise the fixation of the revision component.¹ To prevent complications, the Explant Acetabular Cup Removal System (Zimmer, Warsaw, IN, USA) uses a pivot head to find the centre of rotation of the acetabulum, guiding a cutting blade precisely around its curvature. In large acetabular cups, such as those used in metal-on-metal hip replacements, the pivot head used to fix the centre of rotation is too small.

We describe a technique using the femoral head from the old prosthesis and the foil from a suture pack to centre the device and maintain an accurate centre of rotation.

Technique

The old femoral head is removed from the stem. A foil suture pack is folded in half and wound around the tip of the explant device (Figure 1, inset). The femoral head is then placed onto the tip covered in foil and impacted to secure it. The device is then perfectly centred within the acetabular cup and will function with accuracy (Figure 1).

Discussion

This technique is an effective and cheap way of fixing the centre of rotation when removing large diameter acetabular cups. It prevents the need

for expensive loan equipment, using readily available materials in the operating theatre to maintain accuracy using the device in question.

References

1. Olyslaegers C, Wainwright T, Middleton RG. A novel technique for the removal of well-fixed cementless, large-diameter metal-on-metal acetabular components. *J Arthroplasty* 2008; **23**: 1,071–1,073.

Retrieval of a battery from the bladder without open cystotomy

T Dutton, M Stott, A Gee, M Walton

Royal Devon and Exeter NHS Foundation Trust, UK

CORRESPONDENCE TO

Thomas Dutton, E: tdutton@nhs.net
doi 10.1308/rcsann.2016.0082

BACKGROUND

Urethral foreign body insertion is often encountered, with migration to the bladder being common. Numerous objects have been reported, including iatrogenic and common household objects.^{1,2} We had not encountered a AAA battery in a bladder previously and describe a technique using a Roth Net[®] (US Endoscopy, Mentor, OH, US) transurethraly. A Roth Net[®] is a reinforced net that is designed to be passed down an enteroscope and deployed to retrieve an excised polyp or a foreign body.

TECHNIQUE

Under general anaesthesia with the patient in the lithotomy position, perform a rigid cystoscopy. This confirms the size and position of the foreign body. In order to provide a sufficiently sized working channel, insert a nephroscope transurethraly and repeat the cystoscopy for orientation. Insert a Roth Net[®] down the nephroscope and deploy the net under vision. Place the net over the battery. Once the battery is captured, tension the net to keep the battery in the net. Withdraw the net until it and the battery are aligned closely with the nephroscope. Then withdraw both the nephroscope and the Roth Net[®] containing the battery from the bladder and out of the urethra. It is essential to keep the urethra as straight as possible and under tension to ensure the battery does not snag on the urethral mucosa, potentially causing trauma and risking future stricture.

DISCUSSION

We have described a technique to remove a large and difficult to grasp foreign body from the bladder without the need to perform an open cystostomy, minimising the risk of complications and allowing early discharge.

References

1. van Ophoven A, deKernion JB. Clinical management of foreign bodies of the genitourinary tract. *J Urol* 2000; **164**: 274–287.
2. Alkan E, Basar MM. Endourological treatment of foreign bodies in the urinary system. *JSLS* 2014; **18**: e2014.00271.

Figure 1 The suture is packet folded in half and then wound around the explant device (top left), allowing the use of the original femoral head to centre the device perfectly for removal of the acetabular cup.