The use of the Explant® device in metal backed Exeter™ acetabular component revision

BP Kent, EC Matthews, SM Blake

South Devon Healthcare NHS Foundation Trust, UK

CORRESPONDENCE TO

Benjamin Kent, E: benjamin.kent@nhs.net

None of the authors have any financial interests in the products described in this technical note.

BACKGROUND

Revision of a well fixed cemented acetabular component can lead to significant bone loss. This can be avoided with the in-cement revision technique. We report the use of the Explant® (Zimmer, Swindon, UK) acetabular cup removal system for revision of an Exeter™ (Stryker, Newbury, UK) metal backed cup with preservation of the original cement mantle, allowing subsequent cement-in-cement revision.

TECHNIQUE

The polyethylene liner is reamed out to reveal the metal backing. The Explant® blades are then chosen to match the outer radius of the metal backing. It is important to remove the polyethylene prior to using the Explant® as removal permits the slight inward deflection of the metal backing when the Explant® blade is introduced between this and the cement mantle. A gauze swab is placed in the cup to give a centre of rotation if required. Gentle use of the short and long blades permits separation of the metal backing from the cement (Fig 1).

DISCUSSION

The Exeter™ metal backed cups can be difficult and destructive to remove. This is secondary to cement interdigitation between the gaps of the metal backing. The usual technique requires polyethylene removal followed by a gradual folding in of the metal backing on itself. This often results in cement fracture, necessitating complete removal

Figure 1 Placement of the Explant® device in the metal backing of an Exeter™ cup, allowing removal with minimal damage

along with the associated additional bone loss. If this should occur, the option of cement-in-cement revision is removed. The benefits of this technique are well recognised and include a shorter operative time and reduced blood loss with maintenance of the acetabular bone stock.^{1,2}

References

1. Brogan K, Charity J, Sheeraz A *et al*. Revision total hip replacement using the cement-in-cement technique for the acetabular component: technique and results for 60 hips. *J Bone Joint Surg Br* 2012; **94**: 1,482–1,486.
2. Morley JR, Blake SM, Hubble MJ *et al*. Preservation of the original femoral cement mantle during the management of infected cemented total hip replacement by two-stage revision. *J Bone Joint Surg Br* 2012; **94**: 322–327.