Figure 3 Safe dissection of mesoappendix is possible even with straight instruments.

Figure 4 Incision immediately postoperatively.

TECHNIQUE

The patient is placed in the Trendelenburg position with gentle downwards left tilt, with assistant and surgeon on patient's left and scrub nurse on the right. We use a tri-channel flexible port (2 mm × 5 mm, 1 mm × 10 mm) for the procedure (Fig. 1). Incision should be intra-umbilical so that postoperative scar is well hidden (Fig. 2). Due to a single entry point, the left- and right-hand instruments cross at the point of entry to the peritoneal cavity; therefore, the surgeon must remember that their left hand is operating the instrument on the right side of the screen. Roticulating instruments are commercially available but re-useable straight hook diathermy and graspers are suitable in most cases hence reducing cost. Conventional endoloops are used to ligate the

appendix base (Fig. 3). The inflamed appendix is removed inside the port minimising the chance of wound contamination. Additional 5-mm ports can be added in case of difficulty; however, this has not been necessary so far in our experience. The 12-mm transumbilical incision is closed under vision with 1–2 PDS sutures.

DISCUSSION

The potential advantages of this technique are improved cosmesis (Fig. 4), reduced pain and port-related complications. Appendicectomy provides the ideal initial training operation for single-port surgery and appears to have a short learning curve. Our early results have not shown any potential disadvantages over the traditional laparoscopic technique.

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Use of a dental tool to remove excess cement in unicompartmental knee arthroplasty

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BACKGROUND

Excess retained cement following unicompartmental knee arthroplasty (UKA) is a well-recognised complication. It may result in pain,^{1,2} impingement,^{1,3} loose body symptoms,² vascular problems³ and damage to the prosthesis or structures within the lateral compartment.⁴ Symptomatic patients require additional surgery to manage such complications.^{1–5} We describe the use of a tool normally used in dental surgery in order to avoid these problems.

TECHNIQUE

The senior author (NWB) uses a 'flat plastic' dental instrument. The tool has blunt ends aligned at 90° to each other (Fig. 1) which are perfectly angled to allow the rapid removal of excess cement from the femoral component and the posterior aspect of the tibial tray during prosthesis insertion (Fig. 2). It can be manoeuvred easily to break off excess bits of cement and also to retrieve them by sweeping around the prosthesis from back to side. It is also used to assess alignment of the tibial tray medially and posteriorly to feel for over or under hang.

Figure 1 The tool has ends angled at 90° to each other and can be manoeuvred under the femoral prosthesis to the posterior aspect of the knee easily.

Figure 2 Excess cement being removed from the posteromedial aspect of the tibia during cementation of a medial unicompartmental knee arthroplasty.

DISCUSSION

The removal of cement becomes technically difficult because there is limited surgical exposure. Consequently, the incidence of retained excess cement can be high. In a study of 120 UKAs, 25 postoperative radiographs showed loose or attached excess cement.¹ The 'flat plastic' dental tool helps to avoid retained excess cement and its associated complications in UKA, and is applicable in other minimally invasive arthroplasty procedures.

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The explant can safely remove cemented acetabular components

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BACKGROUND

In hip revision arthroplasty, removing a cemented acetabular component is often an arduous and time-consuming process which may damage the acetabular bone stock.¹ We report an efficient, bone-preserving technique to remove a primary cemented socket along with its cement mantle using the Explant (Zimmer Ltd, Swindon, UK), a device originally designed for removing uncemented sockets.²

TECHNIQUE

The Explant has a range of head sizes to fit inside the primary socket, and an adjustable curved blade which cuts circumferentially around the prosthesis. The blade used should match the diameter of the cement mantle. Working systematically through 360°, an interval is made between the cement mantle and the underlying bone. Once the cement-prosthesis construct is loose, it is gently levered out with an osteotome. We find that almost all the cement comes out in one piece, with the socket still embedded (Fig. 1). Where there are multiple cement anchoring holes, some cement fragments may remain; these are readily removed with a narrow osteotome.

Figure 1 The cement mantle is still attached to the prosthesis.