DISCUSSION

The PORD™ is designed and marketed predominantly for the assistance in reduction of proximal femoral fractures on a traction table. It has not been described in the use of reduction of fractures of the distal femur. Others have described the concept of a PORD™ in the form of a bolster, rolled up towels, a padded drip stand or even a crutch^{3,4} but maintaining reduction can be challenging with these devices and they cannot be used with a traction table. Furthermore, the PORD™ facilitates easy use of the image intensifier. We have found that the PORD™ is a powerful tool, enabling a stable anatomic reduction to be achieved and maintained even for very distal peri-prosthetic fractures (Figs 2–4).

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A method to remove stuck external fixator half pins

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Half pins used with external fixators can be difficult to remove, particularly if they have a smooth shaft or a hydroxyapatite coated thread.^{1,2} Drill chucks can become worn and often slip on smooth pins, and removal tools do not work when there is no bevelled edge on collarless half pins. We recommend bolting a five-hole rancho cube to

Figure 1 Clinical photograph illustrating the use of a five-hole rancho cube to remove a 6mm half pin

a 5mm or 6mm half pin to provide a long lever arm for quick and easy removal of half pins that have become stuck in a long bone.

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Intraoperative bile leakage detection during liver surgery using propofol

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BACKGROUND

Advances in surgical technique and postoperative management have significantly reduced morbidity and mortality rates during liver surgery. However, bile leakage remains a common complication after major liver surgery, increasing morbidity, hospital stay and cost.¹ During the last decade, many intraoperative tests have been reported to help identify and manage bile leakage.^{2,3}

TECHNIQUE

At the end of the procedure, a 18G venous catheter is inserted through the common bile duct or the cystic duct stump if a cholecystectomy was performed. The distal common bile duct is either occluded manually or with the use of a vessel loop. 5–10ml of propofol 1% is injected slowly into the biliary tree with a syringe. With propofol being a milk-like solution, if any leakage is present, white fluid will be visualised on the surgical margin. All detected open bile ducts are closed with a polydioxanone suture. The surgical site is washed off with sterile saline and the test is repeated if necessary. At the end of the test, any residual propofol in the biliary tree is washed away with sterile saline and the catheter insertion site is closed with a polydioxanone suture.

DISCUSSION

Intraoperative detection of bile leakage during liver surgery using propofol is based on the White test.⁴ Instead of using fat emulsion, we prefer using propofol, which is also a fat soluble, white preparation, readily available in any operating theatre. We have successfully used propofol intraoperatively for bile leakage detection during major liver resections and hydatid liver cyst surgery with no adverse effects.

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