skills. Basic surgical skills' courses have, typically, only 1 h dedicated to laparoscopic practice on simulators. Commercial laparoscopic kits are prohibitively costly. We suggest that this BioStatIT DIY Laparoscopic KitCCC (BDLKCCC; Fig. 1) is ideal for home laparoscopic training. By introducing trainees to two-dimensional spatial learning, important laparoscopic skills such as dissection, cutting, suturing and knot-tying can be practised. It is simple to assemble, safe, and has a relatively low cost (£25 for a night-vision camera and £2 for a plastic box). The plastic box is turned facing downwards and a night-vision camera is connected on the inner surface of the bucket. Camera cables can then be connected to a home television, PC or laptop. Trainees can seek decommissioned laparoscopic instruments from their operating department or surgical equipment representatives. A dedicated website (<www.DIYLaparoscopy.com>) has been developed for further free information and guidance to its use.

The world's longest instrument – an aid to acetabular cup extraction in revision hip surgery

MANSOOR KASSIM, SUNIL KUMAR PAI, MARK ASHWORTH
Department of Trauma and Orthopaedics, Torbay District
General Hospital, Torquay, UK

CORRESPONDENCE TO

Mark Ashworth, Consultant Orthopaedic Surgeon, Level 5,
Torbay District General Hospital, Lawes Bridge, Torquay TQ2
7AA, UK
E: mark.ashworth@nhs.net

Figure 1 Cork-screw, slap hammer and a universal femoral component extractor assembled together in series.

Component removal is a time-consuming, yet necessary, step during revision hip surgeries. Because of the diversity of the components and the methods used to secure them, an equal diversity of approaches and tools are necessary for component removal. Many instruments are described for removing the acetabular component of a total hip replacement. Cement-component debonding is an important step in acetabular component removal. Revision instruments,¹ chisels, ultrasound tools and commercially available purpose built devices, such as the 'Explant' acetabular cup removal system (Implex/Zimmer Inc.), achieve this to a greater or lesser degree. We report a modification of a technique that the senior author was instructed in at the Nuffield Orthopaedic Centre in Oxford, UK. Direct disimpaction of the cup is desirable to avoid leverage forces acting on, and potentially damaging, the acetabular bone stock when removing the cup. A cork-screw slap hammer device is ideal for this. Whilst these are available as combined or one-piece instruments, we describe a technique using instruments which should be readily available in any revision theatre, namely a cork-screw, a slap hammer and a universal femoral component

extractor, assembled together in series as shown in Figure 1. The connection between the two extraction components (the cork-screw and the slap hammer) is rigid, rather than a loop of steel wire as was used in the original assembly used in Oxford (where this device was colloquially known in theatre as 'the world's longest instrument'). The more solid arrangement described here is superior to its predecessor in several respects: our device employs a better coupling mechanism (the universal femoral extractor) which is less likely to break during use, directly imparts the disimpacting force (achieved by upwards blows of the slap hammer to the cork-screw engaged in the cup) allowing greater control in cup removal and, unlike single-purpose commercially available devices, has a versatility which allows it be used for a number of different potential purposes.

Reference

1. Paprosky WG, Weeden SH, Bowling Jr JW. Component removal in revision total hip arthroplasty. *Clin Orthop* 2001; **393**: 181–93.