Figure 3 The curved catheter tip and thread act as an anchor for the liver.

umbilical port, and the epigastric and medial right subcostal ports are created, the pigtail catheter is pulled upwards to act as the fourth port to lift the gallbladder fundus (Fig 2). This technique facilitates the dissection of Calot's triangle and achieves satisfactory haemostasis. After gallbladder removal, the curved catheter tip and thread can be seen well fixed in the liver bed and serving as an anchor (Fig 3).

DISCUSSION

This technique can reduce the number of ports used in laparoscopic cholecystectomy following PTGBD in patients with acute cholecystitis.

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Assessing the amount of distraction needed for expandable anterior column cages in the cervical spine

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Background

Anterior cervical cages are used to reconstruct the cervical spine when a whole vertebral body needs to be resected. This is most commonly

Figure 1 Sagittal T2-weighted magnetic resonance image showing C4 fracture and collapse due to tumour, with spinal cord compression and focal kyphosis. The vertebral body is unable to transmit mechanical load and requires removal to decompress the spinal cord.

performed for spinal tumours or trauma where the vertebral body is fractured and unable to transmit mechanical load (Fig 1) or in cervical spondylotic myelopathy, where removal is required to achieve an adequate spinal cord decompression. It can be difficult to know how much to expand the cage following placement to ensure implant stability (so that it does not dislodge), balanced with the risks of over-distraction, which can cause end-plate damage to adjacent vertebrae, neurological injury or displacement of the facets posteriorly, with instability and pain.

Technique

The adjacent, normal cervical motion segment height above or below the corpectomy site (which encompasses the disc space-vertebral body-disc space height) can be measured (Fig 2). A smaller cage can be chosen, inserted and expanded until it reaches this length (Fig 3). The distraction length can be measured formally using a measurement device on the radiology images themselves. Alternatively, more crudely, place a piece of A4-sized paper on the image intensifier and mark two lines on the paper depicting this height, then compare with the corpectomy site height after sequential expansions of the cage.

Discussion

Using this technique, which can be performed intraoperatively using an image intensifier or preoperatively on computed tomography, we have found secure placement of the cage, without over-distraction, can

Figure 2 Intraoperative lateral radiograph showing height measurement between adjacent motion segment (22mm) and size of corpectomy defect (19mm). This height has been measured formally using a measurement device on the images but can be performed more crudely simply by drawing two lines on a piece of paper and comparing the distances at the adjacent motion segment and corpectomy site.

Figure 3 Intraoperative lateral radiograph showing expansion of the cage (black arrow) to match the height of the adjacent motion segment (cage height and adjacent motion segment height both now 22mm). The facet joints have not been distracted.

be achieved in a reproducible manner. This technique provides a rough guide to sizing and should be used as an adjunct to other techniques. It is important to recognise and account for magnification errors on imaging.

Endoscopic-assisted local intralesional curettage and excision of intraosseous lesions in the talus

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BACKGROUND

Traditionally, open curettage and excision of intraosseous talar lesions is hampered by poor visualisation of the bony cavity. A large cortical bone window is often required to increase working space and to provide better illumination. This is difficult in a bone that is 60% covered in articular cartilage, such as the talus. A large bone window increases postoperative pain and the risk of iatrogenic fractures, and damages blood supply to the talus. We present a novel endoscopic technique to improve access to this difficult area.

Figure 1 A 20 × 15 mm cortical window is created on the anterior aspect of talus