Figure 2 Intra-operative use of the bone dust trap.

Figure 3 Salvaged autograft.

harvested from the iliac crest. The yield can be insufficient. Its harvest adds to the length of the operation in addition to increased blood loss. Donor-site complications add to patient morbidity and can lead to chronic pain and disability.¹ In spine surgery, substantial bone dust is generated with the use of high-speed drills and burrs that is usually discarded through irrigation and suction of the operative site. Although the dedicated surgeon may collect some of this bone dust by hand, this is a rather laborious and inefficient method.

TECHNIQUE

We propose a method whereby the bone dust created during spinal surgery can be salvaged. This will add to the amount of autologous bone graft material available and reduce the amount of allograft or synthetic substitute required for the procedure. The technique relies upon the use of a trap designed by one of the

authors (CJ) in the suction circuitry (Fig. 1). This allows the capture of the bone dust as it is generated (Figs 2 and 3) without increase in operative time or blood loss. There is also no need for surgeons to change their routine operative technique.

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Ileostomy efferent limb prolapse: a temporising measure

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BACKGROUND

Gastrointestinal stomas are frequently required during bowel surgery, and are associated with at least a 50% complication rate.^{1,2} Multiple risk factors have been identified for such complications, but none are amenable to pre-operative modification.³ Stomal prolapse (Fig. 1) is a particularly troublesome complication and is usually managed conservatively. However, skin excoriation, bleeding and incarceration may necessitate surgical correction.⁴ Stoma take-down and refashioning has its own complications and morbidity,

Figure 1 Stomal prolapse.

Figure 2 Figure-of-eight suture through mucosa and submucosa, but not skin, placed across the lumen and tied in place.

regardless of the technique used.² Button-pxy fixation and linear stapling provide alternatives, but require at least parenteral sedation in what is often a frail, elderly patient.^{4,5}

TECHNIQUE

We describe a simple measure to hold a prolapsed ileostomy efferent limb in the reduced position. After reduction of the prolapsed limb a figure-of-eight suture, through mucosa and submucosa but not skin, is placed across the lumen and tied in place (Fig. 2). This holds the efferent limb in the reduced position allowing satisfactory appliance adhesion over the afferent spout.

DISCUSSION

This technique represents a useful temporary solution for stomal prolapse. This is not as robust as conventional revision but provides an option in patients who are unfit for general anaesthesia or sedation. It avoids further invasive surgery, is simple and can be safely repeated. Whilst we used this technique repeatedly, it can result in significant stomal bruising and swelling. Care must be taken to place the suture in the correct submucosal plane to provide adequate strength without risking bowel wall perforation and abscess formation.

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Transhiatal chest drainage after oesophagectomy

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BACKGROUND

Chest drainage following oesophagectomy is used to treat pneumothoraces and pleural effusions. Transthoracic intercostal drain placement is standard practice.^{1–3} We describe a novel transabdominal technique for placement of large bore chest drains for pleural, mediastinal, and abdominal drainage following oesophagectomy.

TECHNIQUE

Over a 6-month period, size 28 French gauge tubes were inserted via the hypochondrium to the upper thoracic cavity at the time of oesophagectomy. Digital pleural puncture was carried out prior to drain insertion if it had not occurred during resection and postoperative chest X-rays confirmed correct tube position. Drains were removed after 4–7 days when output reduced to approximately 100 ml/day. Re-accumulation of pleural effusions was managed with percutaneous, small-bore intercostal chest drains placed under ultrasound guidance.

DISCUSSION

Our study group included 32 patients. Complications occurred in 5 patients (15.6%), including re-accumulation of pleural effusion (12.5%) and drain displacement (3.1%). No residual pneumothoraces were observed. There were no intra-operative or postoperative deaths. Transhiatal chest drains inserted intra-operatively reduce the risk of lung parenchymal laceration or haemothorax, and obviate the need for separate abdominal drains. In addition, the longer drain tract, in theory, reduces the risk of ascending infection. Potential disadvantages including tract tumour seeding, risk of abdominal visceral laceration, drain kinking and erosion into mediastinal structures. However, this