in many instances, the formation of a defunctioning loop colostomy to facilitate wound healing. There is often significant tissue loss and this, combined with the scarring/contraction associated with wound healing, can disrupt the integrity of the distal rectum and anal sphincter complex. This may have a significant and unpredictable impact on continence. Examination under anaesthesia, defaecating proctograms and anorectal physiology have traditionally been used to assess such patients. However, some of these are unhelpful or ambiguous and it is difficult to advise patients confidently whether their long-term bowel function will be satisfactory after reversal of colostomy. In these instances, we advocate the use of an antegrade porridge enema.

TECHNIQUE

The patient is admitted and 200 ml of porridge (Quaker's Oats™) is inserted into the distal limb of their loop colostomy. This should be of similar consistency to the output from the proximal limb of the stoma and will thus form a comparable stool to that which the patient may expect if the stoma was reversed. A record is kept of the stool frequency/urgency, consistency and any incontinence. It can be repeated on sequential days so that both the patient and physician can get a reasonable idea of bowel function.

DISCUSSION

The main advantage of this technique is that the colon delivers a 'stool' to the distal rectum/anus, which, in a pragmatic sense, is much closer to reproducing the likely function following reversal of a stoma than a retrograde contrast study. Furthermore, unlike either anorectal physiology or defaecating proctograms, patients have a clear understanding of this technique and can easily make a sensible decision regarding stoma reversal based on their experiences with it. We have used antegrade colonic porridge enemas in a number of such patients and found them to be a simple, safe, cheap and reasonably effective way to evaluate future bowel function prior to potential stoma reversal following severe perineal sepsis.

Use of a 'mirror plate' in minimally invasive plate osteosynthesis

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INTRODUCTION

Minimally invasive plate osteosynthesis (MIPO) has the advantages of reducing surgical trauma to the soft tissue envelope

Figure 1 Screw holes of the superficial plate are marked, mirroring the screw holes inserted plate

with less disturbance of the fracture site haematoma and a reduced wound length.¹⁻⁴ Potential disadvantages include entrapment of neurovascular structures beneath the plate, mal-reduction and inaccurate plate position. We present a technique which significantly reduces X-ray exposure when performing MIPO. The example used is that of the distal tibia locking compression plate (LCP; Synthes, Stratec Medical, Oberdorf, Switzerland); however, the principle can be applied to any minimally invasive plating system for which there are no specific jigs.

TECHNIQUE

The fracture is reduced, the plate is introduced through a small incision and its position confirmed using fluoroscopy. Temporary k-wires are inserted through the designated holes in each end of the plate. Usually, fluoroscopy is required to locate each screw hole in the plate prior to making incisions for screw insertion. Instead of this, a duplicate, 'mirror', plate is applied over the previously inserted k-wires and pressed down onto skin. Using a sterile marker pen, the holes of the overlying plate are drawn onto the underlying skin. The superficial plate essentially mirrors the inserted plate and acts as a template for screw positions. Incisions are centred on these skin marks and the screws are inserted in the usual manner into either the locking or compression holes.

DISCUSSION

We have found this to be a highly useful technique which not only aids in screw hole location but also significantly reduces the operation time and the use of intra-operative fluoroscopy.

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A simple surgical technique for removal of radio-opaque foreign objects from the plantar surface of the foot

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INTRODUCTION

Removal of foreign objects such as bits of broken glass or a piece of broken needle from the plantar surface of the foot can be challenging. It is common for the surgeon to end up with a larger than planned surgical incision in pursuit of the elusive foreign object. Despite a long surgical incision, the foreign object may not be found; frequently, the surgeon has to use an image intensifier during the procedure to help locate the foreign object. We describe a simple technique, which could be used for removal of radio-opaque foreign objects from the plantar surface of the foot.

TECHNIQUE

The patient is positioned supine with the foot at the end of the operating table. The foot is prepared and draped as usual. Under image intensifier guidance, three 20-gauge needles are inserted, 2 cm apart, angled at 45° to the plantar surface of the foot so that the tips of the needles are in contact with the radio-opaque foreign object. The needles are inserted around the puncture wound on the plantar surface of the foot. The skin is incised in the triangular region between the needles (Fig. 1). Sharp

Figure 1 The surgical incision is through the centre of the triangular area formed by the needle insertion sites (circles)

dissection carried down to the tips of the needles will identify the foreign object and facilitate easy removal.

CONCLUSION

This is a simple technique for identifying and removing radio-opaque foreign objects from the plantar aspect of the sole.

A technique to assist reversal of abdominal stomas

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BACKGROUND

The operative procedure of reversal of abdominal stoma is often underestimated in its complexity but its complications can lead to significant morbidity (e.g. anastomotic leak, wound infection). We describe a technique of abdominal stoma reversal that facilitates dissection of tissue planes and good postoperative analgesia.

TECHNIQUE

The patient is cleaned and draped as normal. The area around the stoma is infiltrated with 40 ml of 0.25% bupivacaine with adrenaline diluted with normal saline until the skin blanches (or the maximum dose allowed by body weight is reached). The skin around the stoma is excised elliptically. The stoma is mobilised down to the peritoneal cavity as normal but with the added benefit of the local anaesthetic to dissect and define tissue planes. The anastomosis is performed and the bowel reduced back into the peritoneal cavity. Closure of the rectus and skin is performed.

DISCUSSION

This technique has the advantages of improved stoma definition as well as easier dissection of tissue planes by 'hydrodissection' of the local anaesthetic infiltration. It also benefits the patient with good regional analgesia in the immediate postoperative period.