Catheterisation of the oedematous uncircumcised penis

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BACKGROUND

Male patients with penoscrotal oedema often require catheterisation. In gross oedema, however, passing a urethral catheter is technically challenging. The external urethral meatus cannot be visualised and the flexible catheter tip is not easily guided into place past the swollen non-retractile foreskin. Use of an introducer to increase catheter rigidity may be traumatic if misplaced. Suprapubic catheterisation is equally hazardous in the presence of lower abdominal wall oedema or lack of palpable bladder. To overcome this problem, some practitioners use a well-lit and lubricated proctoscope in order to advance the catheter under direct vision.¹ This technique requires skill, however, and the general availability of suitable proctoscopes (especially on non-

surgical wards) is not surprisingly lacking. The following method has been used as a suitable alternative and requires only the basic catheterisation skills and universally available equipment.

TECHNIQUE AND DISCUSSION

After routine preparation and drape, local anaesthetic jelly is inserted into the orifice of the prepuce. A gloved finger dilates the orifice to allow the closed tips of a well-lubricated McGill's forceps to be carefully advanced inside. On reaching the glans, the tips of the forceps are opened up and around the glans, which can then be secured with gentle grip and traction. The oedematous foreskin can then be concertinaed down the outside of the McGill's by the finger and thumb of an assistant bringing the external urethral meatus into view. Catheterisation can then take place under direct vision in the normal manner. This technique is simple and effective, also painless and safe if done gently. The blunt round tips of the McGill's holds the glans without trauma and the smooth round limbs of the forceps allows the oedematous foreskin to be comfortably and safely concertinaed along its length. A selection of McGill's forceps can be found on all wards if only in the anaesthetic tray of the resuscitation equipment.

Reference

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Figure 1 Traction of the glans and the oedematous foreskin concertinaed bringing the external meatus into view for catheterisation.

Poller blocking screws and intramedullary nailing in tibial malunion

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BACKGROUND

Poller screws as blocking screws and intramedullary nailing have been described to treat acute metaphyseal fractures of the tibia.¹⁻³ This technique helps to control deformity in the coronal plane by narrowing the medullary canal. However, we are unaware of any description of this approach being used to manage tibial malunion. We present a technique for the correction of malunion in tibial fractures using Poller screws and intramedullary nailing avoiding open surgery.

TECHNIQUE

The patient is positioned on a radiolucent table and draped in the usual manner. The image intensifier is used to localise the

fracture line and the degree of deformity (Figs 1 and 2). Poller screws are sited, under image intensifier guidance, distal to the fracture site anteroposteriorly. This narrows the medullary canal

Figure 1 Use of image intensifier to localise the fracture line and the degree of deformity.

Figure 2 Use of image intensifier to localise the fracture line and the degree of deformity.

Figure 3 Correction of the deformity in the coronal plane.

Figure 4 Correction of the deformity in the coronal plane.

and allows centralisation of the intramedullary nail in the widening metaphyseal portion of the distal tibia. Once the screws are sited, a guide wire is passed down the medullary canal followed by the intramedullary nail in the usual way. By creating a narrow canal, it is possible to achieve good control and to correct the deformity in the coronal plane (Figs 3 and 4).

DISCUSSION

The use of blocking screws has been described for acute metaphyseal tibial fractures; however, we have found that it is a useful alternative to the more conventional methods of managing tibial malunion.^{1–3} Our case resulted from a stress fracture of the tibia with an intact fibula, causing varus forces to be translated across the fracture. Therefore, we performed a fibula osteotomy prior to correcting the deformity using the nail and Poller screws. There are a number of therapeutic options in this situation including wedge casting, opening the fracture site and internal fixation, conventional intramedullary nailing and external fixation with a fine wire device. However, our technique is relatively simple and quick to perform. Furthermore, it enables good reduction and stable fixation permitting immediate full weight-bearing without having to open the fracture site.

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Prevention of airway fire during tracheostomy – a further precaution

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BACKGROUND

Airway fire is a rare, but potentially fatal, complication of tracheostomy.^{1–3} Standard precautions to reduce the risk of fire aim to keep the three elements of the 'fire triangle' – fuel, oxygen and

Figure 1 The nasogastric tube in place, above the balloon of the endotracheal tube.

heat – separate. These include avoiding the use of diathermy once the trachea is open and avoiding the use of high inspired oxygen concentrations. However, there are situations where these two particular precautions are difficult to take; for example, in a patient who requires diathermy to arrest a post-tracheostomy haemorrhage and who has a high oxygen requirement, leading to a potentially explosive combination of diathermy and oxygen. We report a further precaution to reduce the risk of fire in this situation.

TECHNIQUE

The patient is intubated endotracheally and standard precautions to reduce the risk of fire are taken. Additionally, a nasogastric tube is passed into the upper trachea and carbon dioxide is passed through it into the upper trachea as shown in Figure 1. This produces a high concentration of carbon dioxide in the operative field and a high concentration of oxygen in the lungs, separated by the cuff of the endotracheal tube. The high carbon dioxide concentration in the operative field is confirmed by a probe placed at the entrance to the tracheostomy and allows the use of diathermy with a reduced risk of fire.

DISCUSSION

This precaution has been used to reduce the risk of fire in patients who require diathermy to arrest a post-tracheostomy haemorrhage and who have a high oxygen requirement.

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