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

N MANI, V MALIK, C BREWIS, R GRAY

Department of Otolaryngology, Addenbrooke's Hospital, Cambridge, UK

CORRESPONDENCE TO

N Mani, Department of Otolaryngology, Addenbrooke's Hospital, Cambridge CB2 2QQ, UK
T: +44 (0)1223 245151; F: +44 (0)1223 217559;
E: navmani@hotmail.com

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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