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Technical note

Overnight endotracheal intubation in patients who have free-flap reconstruction of the head and neck: a cautionary note

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Overnight intubation, which avoids the need for tracheostomy in patients who have operations for cancer of the head and neck, has increased in popularity in the United Kingdom since initial reports of the Gloucester experience in the British Journal of Oral and Maxillofacial Surgery.[1] We have adopted overnight intubation as part of an enhanced recovery protocol in our own unit, with positive results.

Our early experience has yielded valuable lessons that we think may be of use to other units that introduce this technique. On two occasions, pressure sores have been a complication: the first because of an inappropriate choice of endotracheal tube, and the second because of inadequate padding to protect the skin of the forehead.

A rigid endotracheal tube was initially favoured by our anaesthetists to provide a more secure airway and to aid suctioning when prolonged intubation (more than 24 hours) was anticipated. The tube is required to form a "hairpin" bend on exit from the nose to allow it to be secured to the forehead intraoperatively, and to avoid the possibility of strangulating the pedicle with ties at the neck and lower face at the end of the operation. An inflexible semi-rigid tube does not easily conform to this shape, and in our experience may result in pressure on the alar rim (Fig. 1).

Pressure sores on the alar rim have previously been reported and various strategies proposed,[2–4] but we have found that use of a simple PORTEX® Ivory polyvinyl chloride north-facing, nasal, profile soft seal cuff, polar preformed endotracheal tube, which is adequately padded, is sufficient to avoid this complication when an intubation period of 24 hours is anticipated (Fig. 2).

Our second patient developed a pressure sore of their forehead because of inadequate padding of the tube and connector where it was secured with tape. This sore healed but left a scar.

When overnight intubation is planned, it is now the policy of our unit to discuss the material of the tube and the need for

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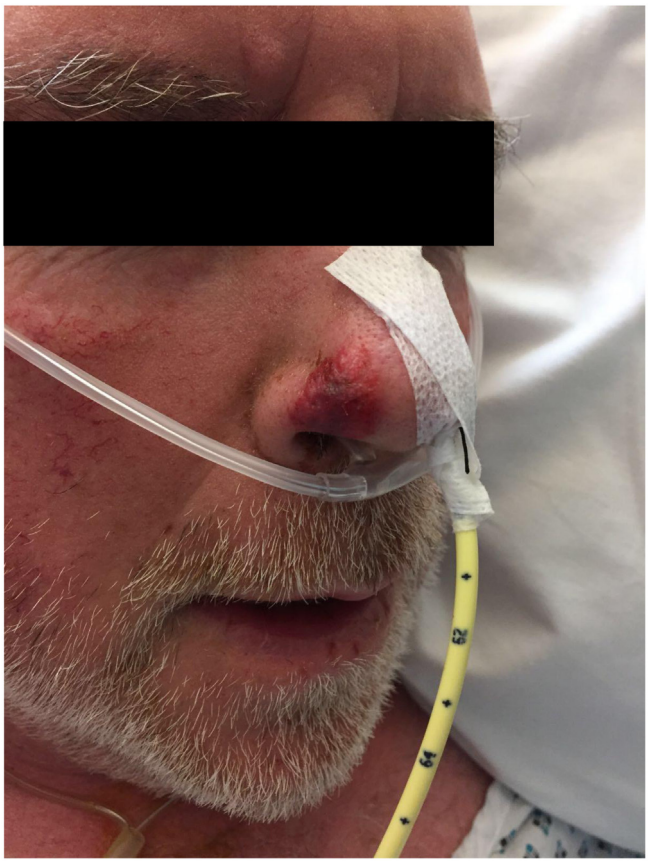

Fig. 1. Pressure sore on alar rim of right nostril secondary to trauma from the use and positioning of an inappropriate nasotracheal intubation tube.

cautious padding at the preoperative "huddle". An additional five minutes is allocated at the start and completion of the case to ensure that the tube is adequately protected with padding wherever it is in contact with the patient's skin. We advise caution when adopting overnight intubation to prevent these avoidable complications.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patients' permission

Ethics approval not applicable. Patients' permission was obtained for use of the photographs published.

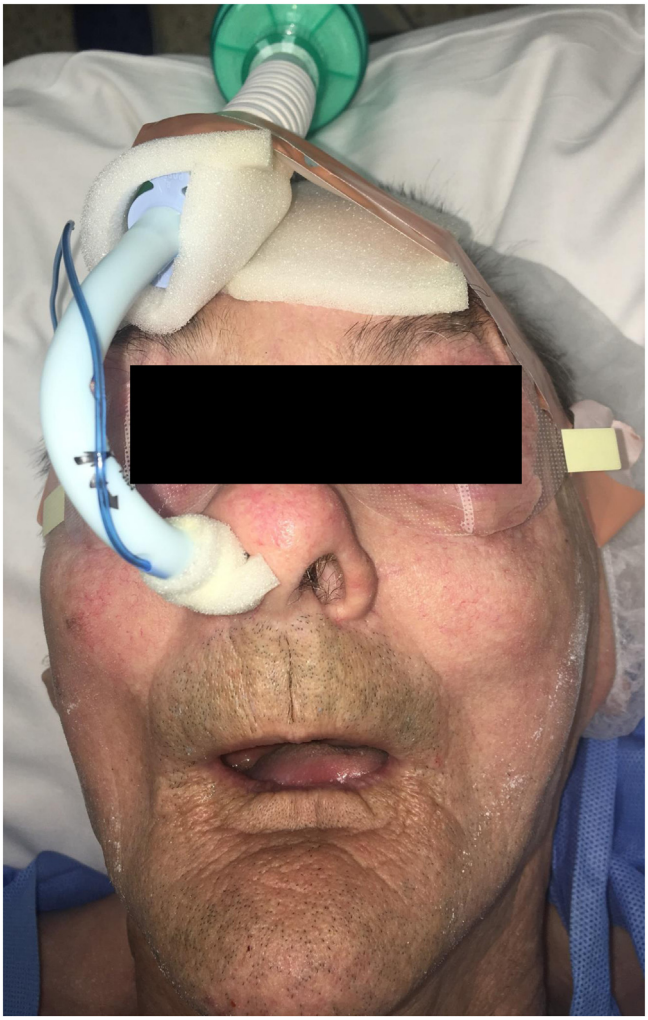

Fig. 2. Standard endotracheal intubation tube and padding adopted in our unit. Note the protective padding at the alar rim and forehead.

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