



Case report

Non traditional method of endotracheal tube fixation in bearded patients undergoing facial and occipital surgeries[☆]



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Abstract Endotracheal tube should be safely secured to prevent potentially life-threatening complications like accidental extubation. Bearded patients are a challenge to the anaesthesiologists. Most of the methods of endotracheal fixation described in the literature were not suitable in our cases because of the surgical area involved (occipital in one case and face in the other). In our cases, tube fixation was done by a new method which has never been described in the literature before.

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Sir,

We devised an innovative method for securing the endotracheal tube in patients with facial hair. Our first patient was a 56 year male posted for right sided occipital tumour. The second case was a 50 year old booked for incision and drainage of right maxillary abscess. In both the cases consents for shaving the beard were refused on religious grounds as unshorn hair is

regarded with the highest importance in the Sikh religion (see [Images 1–3](#)).

Endotracheal tube fixation should be adequate to prevent potentially life-threatening complications like accidental extubation. Bearded patients are a challenge to the anaesthesiologists as besides mask ventilation, tube fixation is difficult. It is usually done with gauze bandage at the angle of mouth which is tied around the nape of the neck and the knot comes at the angle of jaw.

Various other methods of endotracheal tube fixation in patients with facial hair have been described in the literature including adhesive tape [1], dynaplast and steridrape [2], facial hair [3], discarded oxygen therapy tubing, umbilical tape [4], surgical sutures [5], endotracheal tube holder made from Velcro tape, elastic tape and a plastic hook [6].

[☆] This work was done in Department of anaesthesiology, PGIMS, Rohtak (India) where all the authors were working previously.

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Image 1 Patient undergoing occipital tumour surgery (lateral view).



Image 2 Patient undergoing occipital tumour surgery (front view).

However, many of these need to be tied around the nape of the neck and was not suitable for us as it would have interfered in the surgical fields (occipital in one case and face in the other). So in our case, after fixing the tube at the angle of the mouth, one end of the bandage was passed under the axilla (properly padded) and brought behind the neck from the other side to fasten it with the other end. To counteract the downward pull, an adhesive tape was wrapped around the tube and fixed on the bridge of nose.

This technique using gauze bandage imposes no traction on the endotracheal tubes, creates no engorgement of neck veins, almost negligible chances of accidental extubation, access to the internal or external jugular veins are not undermined and can be used in prone position or facial surgery. Besides fixing the tube with gauze bandage does not need any special equipment or expertise. The technique described by us can be safely used in cases where surgical area prohibits the use of other methods.



Image 3 Patient undergoing right maxillary abscess surgery.

Conflict of interest

The authors declare that there are no conflict of interest.

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