This is a repository copy of Simple method of securing an airway while accessing a bleeding tracheostomy site when nasal or oral endotracheal intubation is not feasible.

White Rose Research Online URL for this paper:
http://eprints.whiterose.ac.uk/112692/

Version: Accepted Version

Article:
Bobinskas, AM, Kanatas, AN, Law, MB et al. (1 more author) (2016) Simple method of securing an airway while accessing a bleeding tracheostomy site when nasal or oral endotracheal intubation is not feasible. British Journal of Oral and Maxillofacial Surgery, 54 (9). pp. 1042-1043. ISSN 0266-4356

https://doi.org/10.1016/j.bjoms.2016.02.039

© 2016, Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International
http://creativecommons.org/licenses/by-nc-nd/4.0/

Reuse
Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher’s website.

Takedown
If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.
A simple method of securing the airway whilst accessing a bleeding tracheostomy site when nasal or oral endotracheal intubation is not feasible.

1 Alexander M Bobinskas, Clinical Fellow
Leeds Teaching Hospitals
Email: Alexander.bobinskas@nhs.net

2 Anastasios N Kanatas, Consultant Head and Neck Surgeon / Senior Lecturer
Leeds Teaching Hospitals and St James Institute of Oncology email: a.kanatas@doctors.org.uk

3 Gillon Fabbroni, Consultant Oral and Maxillofacial surgeon, Leeds Teaching Hospitals
email: gfab@doctors.org.uk

Corresponding Author: Anastasios N Kanatas
A simple method of securing the airway whilst accessing a bleeding tracheostomy site when nasal or oral endotracheal intubation is not feasible.

Tracheostomies are frequently used in patients undergoing surgery for treatment of head and neck cancer (1-3). Bleeding is a well recognised potential complication of tracheostomy insertion (3,4), which may occur in around 5% of cases (5). When attempting to control post operative bleeding from around a tracheostomy, it is often necessary to directly visualize and access the site of haemorrhage, however visualization and access are often impeded by the tracheostomy tube.

Oral or nasal endotracheal intubation facilitates removal of the tracheostomy tube to aid in haemorrhage control whilst maintaining a secure airway, however in post-operative patients who have undergone head and neck reconstructions this may not always be feasible or desirable.

A simple and effective method which allows temporary access to a bleeding tracheostomy stoma whilst maintaining a secure airway is to intubate the patient via the tracheostomy tube as described below.

After ensuring suitable facilities to anaesthetise the patient and explore the bleeding site are available, the inner tube of the tracheostomy tube is removed and an endotracheal tube (ETT) such as a cuffed microlaryngoscopy tube is passed via the lumen of the tracheostomy tube.
(figure 1.) into the patient’s trachea and balloon is inflated. Correct placement of the newly inserted ETT is confirmed in the conventional manner via capnography.

Once the airway is secured in this way, the tracheostomy tube can be retracted or completely removed by releasing any tapes or sutures which have been used to secure it and withdrawing it over the top of the endotracheal tube (figure 2).

Withdrawal of the tracheostomy tube provides improved access and visualization to the stoma site to allow for haemorrhage control. After haemostasis is achieved the tracheostomy tube can be replaced by sliding it back over the ETT, which acts as a guide for the tracheostomy tube into the trachea.

Bleeding from a tracheostomy during the immediate post-operative period is a rare but important complication following major head and neck surgery. Different approaches have been adopted but here we presented a simple method of securing the airway and providing access in order to identify the bleeding area.

Figure 1 – size 4 microlaryngoscopy tube inserted into the lumen of a size 8 shiley tracheostomy tube (inner cannula removed)

Figure 2 – tracheostomy tube retracted along ETT (flange of microlaryngoscopy tube can be removed to enable tracheostomy tube to be removed)
References


Figure 1.