

Using An Endotracheal Tube Combined With An Adjustable Flange As A Longer Tracheostomy Tube

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Citation

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Abstract

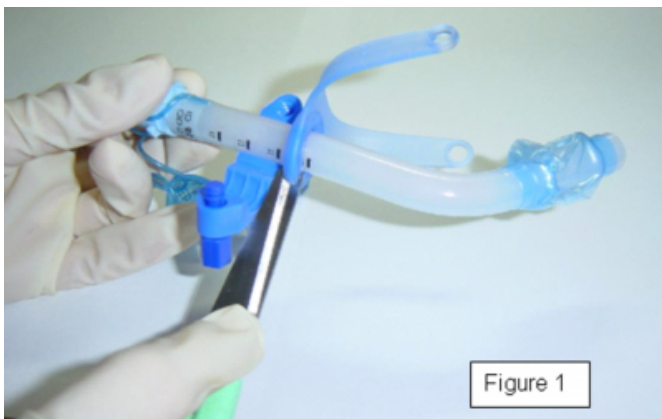
Tracheostomy is a procedure commonly performed on patients on the ITU. There are many indications for tracheostomy and on many units most are now performed percutaneously. Surgical tracheostomies are often reserved for cases where anatomical considerations make the patient unsuitable for percutaneous tracheostomy. One of the most common anatomical difficulties is a large neck. In these cases an adjustable flange tracheostomy may be required. Sometimes, however, this is not available or does not provide sufficient length to allow the cuff to lie properly in the trachea. Poor placement of the cuff may result in inadequate ventilation¹ through leakage around the cuff, or occlusion of the lumen of the tube. Malposition of the tube may present as an obstructed airway or result in frequent, unnecessary tube changes².

A temporary means of obtaining increased distance between the skin and the cuff is to insert an endotracheal tube (ETT) through the stoma in place of the tracheostomy tube. This allows good positioning of the cuff in the trachea, but presents a problem of how to secure the tube to prevent dislodgement. To overcome this problem, we present a method of securing the ETT using the flange of an adjustable flange tracheostomy tube.

METHOD

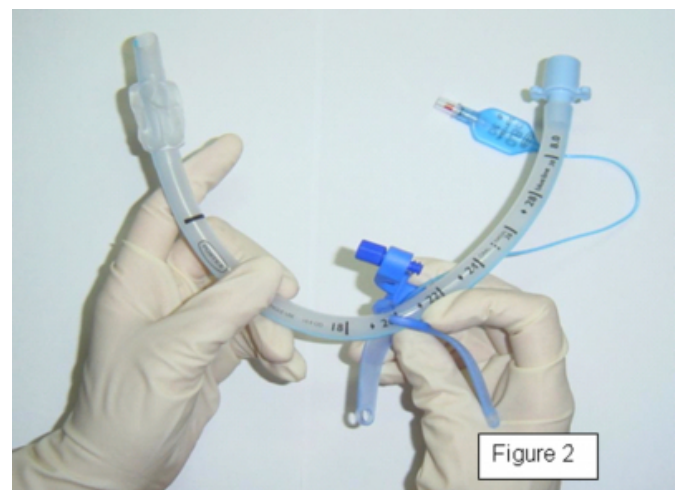
Obtain a Portex® adjustable flange tracheostomy tube and Portex® endotracheal tube of the same diameter. Completely unscrew the plastic screw that is used to tighten the flange on the tracheostomy tube. Cut through the ring that attaches the flange to the tube (Fig 1).

Figure 1



Attach the flange around the endotracheal tube and tighten the screw (Fig 2).

Figure 2



Although this method is not meant as a permanent solution, it will act a temporary measure until a longer tracheostomy tube can be obtained, or the oedema settles sufficiently to allow the placement of a standard adjustable flange tracheostomy.

References

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2. Kearl RA, Hooper RG Massive airway leaks: an analysis of the role of endotracheal tubes. Crit Care Med. 1993; 21.4: 518-21.

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