Dental Rolls for Eye Operations

To the Editor:—During general anesthesia, it is common to see secretions accumulate in the back of the throat and the nose, which are routinely suctioned out during, or at the end of, a case. The face of a patient scheduled for ophthalmic surgery under general anesthesia is usually physically inaccessible to the anesthetist. It is difficult to detect secretions accumulating in the nose or mouth once the patients are fully draped. Also, reaching under the drapes and suctioning the secretions may be cumbersome and may disturb the operative field. We recently administered general anesthesia to a child undergoing eye muscle surgery in whom the surgeon, during the procedure, noticed secretions from the nose flowing under the drapes and into the eye. This led to a break in sterility necessitating a repeat sterile prep and drape. This also necessitated the use of prophylactic antibiotics.

Since then, we have begun using Rhode Island dissectors (fig. 1), commonly known as Dental Rolls, to plug the nostrils of ophthalmic surgery cases undergoing general anesthesia. Following intubation, they can be easily placed into the nostrils to block any nasal secretions. Also, we have been suctioning the nose and the throat just prior to the draping of the patient.

Bideshwar Kataria, M.D.
Instructor in Anesthesia

Anesthesiology
66:437-438, 1987

An Easily Assembled Device for Transtracheal Oxygenation

To the Editor:—It is well established that placement of a large-bore intravenous cannula through the cricothyroid membrane is an effective method of oxygenating the patient with supraglottic airway obstruction.1-4 Several devices have been proposed for connecting the hub of the intravenous cannula to a source of positive-pressure oxygen.5-8 Unfortunately, in the situation where airway difficulty is not anticipated, these devices may not be readily

References


(Accepted for publication November 3, 1986.)

FIG. 1. Volunteer shown with dental rolls in nostril. Package containing rolls is also seen.

Neal Fleming, M.D.
Instructor in Anesthesia
Department of Anesthesia
Georgetown University Hospital

(Accepted for publication November 3, 1986.)
of the syringe attaches to the transtracheal cannula, and 
the endotracheal tube end provides a standard 15-mm 
connector. This device will deliver pressures in excess of 
50 cm H₂O to the transtracheal catheter when connected 
to a resuscitation bag or anesthesia machine.

Attia et al. studied the pressure-flow relationships 
of various standard intravenous catheters. Their equipment 
consisted of a self-inflating resuscitation bag, and a 3-mm 
pediatric endotracheal tube connector to fit the hub of 
the intravenous cannula. An 18-gauge cannula delivers 
nearly 500 ml/min at a driving pressure of 5 cm H₂O. 
This more than satisfies the basal oxygen requirement of 
the adult, although hypercarbia would result. A 14-gauge 
cannula delivers in excess of 7000 ml/min at a pressure 
of 50 cm H₂O. Life-sustaining oxygenation can be pro-
vided in this fashion. We have found that the endotracheal 
tube/syringe barrel device is similar in its resistance char-
acteristics to a 3-mm endotracheal tube connector.

There are many brands of endotracheal tubes and sy-
ringes. The use of the endotracheal tube cuff corrects 
for variations in barrel size between different brands of sy-
ringes. Thus, commonly available cuffed endotracheal 
tubes and syringe barrels can be rapidly assembled into 
an effective transtracheal oxygenation system.

**REFERENCES**

1. Attia RR, Battit GE, Murphy JD: Transtracheal ventilation. JAMA 234:1152–1153, 1975
6. Dunlap LB, Oregon E: A Modified, simple device for the emer-
gency administration of percutaneous transtracheal ventilation. JACEP 7:42–46, 1978
8. Scuder PE, McLeskey CH, Comer PB: Emergency percutaneous 
transtracheal ventilation during anesthesia using readily avail-
able equipment. Anesth Analg 61:867–870, 1982

*Accepted for publication November 3, 1986.*