

Clinical Workshop

C. PHILIP LARSON, JR., M.D., *Editor*

A Simple Technique of Endotracheal-tube Fixation

HALAPPA N. KONCHIGERI, M.B., B.S.,* AND JOHN HOMI, M.B., B.S.†

Endotracheal tubes are generally held in position by means of adhesive tape applied to the face. Fixation of endotracheal tubes by tape presents several problems. Many male patients have beards and mustaches, making it extremely difficult to tape the tube to the face. Some patients have allergic cutaneous responses to the tapes. When patients are in the prone, lateral, or sitting position, secretions from the mouth may make the adhesive tape slippery and ineffective. For these reasons, we have developed a simple method for fixation of orotracheal or nasotracheal tubes.

Fixation is achieved by means of a disposable operating-room face mask with string attachments. The face mask is placed under the occipital region of the patient with the two strings on either side, prior to induction of anesthesia. Following endotracheal intubation, the two distal strings from either side are approximated and, after putting one or two knots around the endotracheal tube, are tied together. The airway can be included in the knot or tied separately. The proximal pair of strings is used to stabilize the breathing tubes with the Y adapter over the forehead after placement of a pad between the fore-



FIG. 1. Use of the face mask for fixation of endotracheal tube, airway and breathing tubes.

* Assistant Professor, Department of Anesthesiology, Abraham Lincoln School of Medicine, University of Illinois Hospitals, Chicago, Illinois 60612.

† Professor and Chairman, Department of Anesthesiology, University Hospital of West Indies, Mona-St. Andrews, Kingston-7, Jamaica.

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head and the tubes (fig. 1). Thus, the ordinary operating-room mask can serve the dual function of securement of the endotracheal tube and stabilization of the breathing tubes and lessen the hazard of accidental extubation or endobronchial intubation.