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Fiberoptic Assisted Tracheal Intubation under General Anesthesia with IPPV

To the Editor:—Fiberoptic intubation of the trachea in the awake patient is frequently used when difficult tracheal intubation is anticipated. However, there are occasions when fiberoptic intubation should be performed with the patient anesthetized with a general anesthetic and when intermittent positive pressure ventilation (IPPV) is required. Masks¹ incorporating diaphragms have been specifically designed for this purpose, but have several disadvantages. First, the further the anesthesiologist is removed from the mouth, the greater the manual dexterity required. Second, the diaphragm in the mask reduces the maneuverability of the bronchoscope, and pieces of the diaphragm have been aspirated during fiberoptic intubation.²

The use of an adhesive transparent dressing (ATD) to provide an airtight seal in laser bronchoscopy³ has been described, and we have incorporated this idea into fiberoptic tracheal intubation with IPPV. The requisites are a sheet of ATD that will easily cover the mouth and nose, an Airway Intubator[®],⁴ and what we have chosen to call a dual purpose connector (DPC). The DPC (fig. 1) consists of three sections, the proximal end having the standard 15 mm connection, the central section being a collar that will fit snugly into the proximal orifice of the Airway Intubator[®], and the distal part having a 2-cm slot that will admit the passage of a fiberoptic bronchoscope.

Following induction of anesthesia, an Airway Intubator[®] is inserted into the patient's mouth and the ATD applied to the face in such a way that an opening made in the ATD is situated over the proximal orifice of the Airway Intubator[®]. The DPC is then inserted through this opening, and oxygen or inhalation anesthesia may be administered *via* the 15-mm connector (fig. 1). A fiberoptic bronchoscope with an endotracheal tube is then inserted *via* the slot in the distal section that becomes exposed on slight withdrawal of the DPC. As soon as the bronchoscope is well inside the trachea, the DPC is discarded and the previously jacketed endotracheal tube passed into the trachea through the Airway Intubator[®]. IPPV can be applied at all times, except during the passage of the endotracheal tube.

G. MCALPINE, M.D., F.R.C.P.C.
Anaesthesia Resident

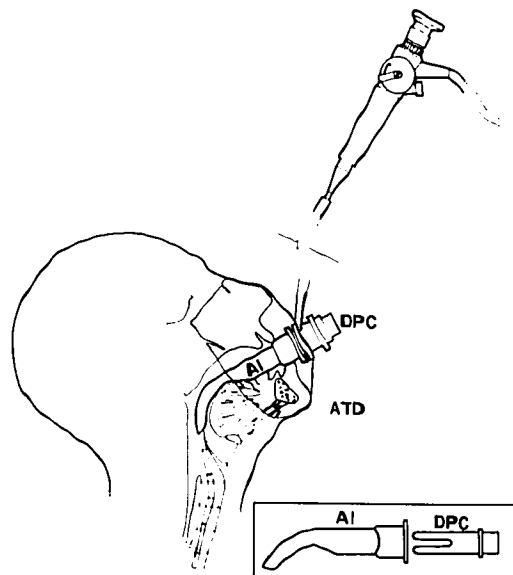


FIG. 1. Schematic of dual purpose connector (DPC) in place during fiberoptic intubation of the trachea. Also shown are relative positions of the Airway Intubator[®] (AI) and the adhesive transparent dressing (ATD).

R. T. WILLIAMS, M.D., F.R.C.P.C.
Assistant Clinical Professor

*Department of Anaesthesia
Foothills Hospital at the University of Calgary
Calgary, Alberta, Canada T2n 2T9*

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