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A New Partial Spiral Tube for Nasotracheal Intubation

To the Editor:—Nasotracheal intubation is one of the solutions for both maintenance of an airway and providing an adequate surgical field in oral and maxillo-facial surgery. However, problems still arise with respect to connection of the endotracheal tube to the breathing system. Several types of connectors have been developed for these needs. Although nylon-embedded latex connectors partially can meet these needs,¹ disconnection may still occur, and gas flow resistance is increased due to the internal diameter of the connection part being smaller than that of the endotracheal tube, especially in children. A newly developed connector, FLEXIBEND®, may be one of the best presently available.² An armored latex spiral endotracheal tube has been advocated in an attempt to avoid using connectors in nasotracheal intubation, but obstruction may occur because of its laminated construction.³ In addition, the use of this device is limited in children. Recently, an improved partial spiral endotracheal tube* made of silicon (3.5-9.0 mm ID) has been developed to meet the special needs of oral and maxillo-facial surgery. The distal portion of the tube consists of a conventional curved Magill type tube and the proximal portion of a spiral tube. The length of the two portions of the tube are designed according to the anatomic differences in children and adults (fig. 1). For example, the tube with an 8.0 mm ID consists of Magill type tube of 20 cm length and spiral tube of 16 cm length. When the patient is intubated, the junction of the two portions can be placed inside the nostril. Further, the thickness of the spiral tube is less than that of the Magill type tube so that the tube easily bends at the nostril in any direction for convenient attachment to the breathing system. Blind nasotracheal intubation can also be easily performed. Nasotracheal intubation with this device has proven

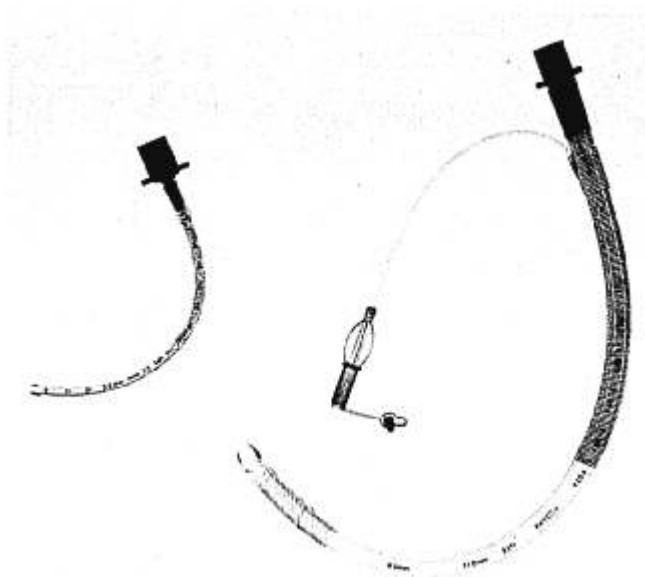


FIG. 1. Partial spiral tubes for children (left) and adults (right).

useful, regardless of the patient's age, for airway management in oral and maxillo-facial surgery in our department.

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* This partial spiral tube named SWAY TUBE® now is produced by Fuji Systems Co., Ltd., 1-11-1, Ebisu, Shibuya-ku, Tokyo 150, Japan.