

CORRESPONDENCE

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Foreign Body in the Trachea Originated from the Inner Wall of the Univent® Tube

To the Editor:—A broken Y-connector and a brittle tube connector have been reported to cause a circuit leak with potential aspiration of the fragment.^{1,2} We recently encountered a similar complication with the Univent® endotracheal tube.

A 65-yr-old man underwent resection of the metastatic tumor of the right lung. A 9.0-mm ID Univent® tube was used during the procedure. At the conclusion of the procedure, before awakening the patient, we pulled the tube connector out of the tube and reinserted it twice during the process of taking a chest radiograph. We subsequently performed a bronchoscopic examination and found something transparent in the trachea near the carina. We took it out and found its material and shape corresponded with a defect of the inner wall of the proximal end of the Univent® tube (fig. 1).

In the Univent® tube, the proximal portion of the lumen for the bronchial blocker is filled with the same material as the tube itself. However, the boundary between the tube and the filled material can be peeled off by strong force; we confirmed this possibility with another Univent® tube. In addition, because the diameter of the enclosed connector is designed to be larger than the inner diameter of the tube, the connector tends to scrape the inner wall of the tube on insertion and is easily pulled out unless inserted very deeply. In this case, the repeated reinsertion of the connector into the tube tore off the inner wall, resulting in a foreign body in the trachea.

Although the Univent® tube has been widely used for more than 10 yr, this complication has not been previously reported. The manufacturer is now planning to improve the shape and material of the tube or to enclose a warning in the package. Until this is done, we strongly recommend that the connector be pushed gently into the tube from the side of the blocker first to prevent scraping the fragile inner wall.

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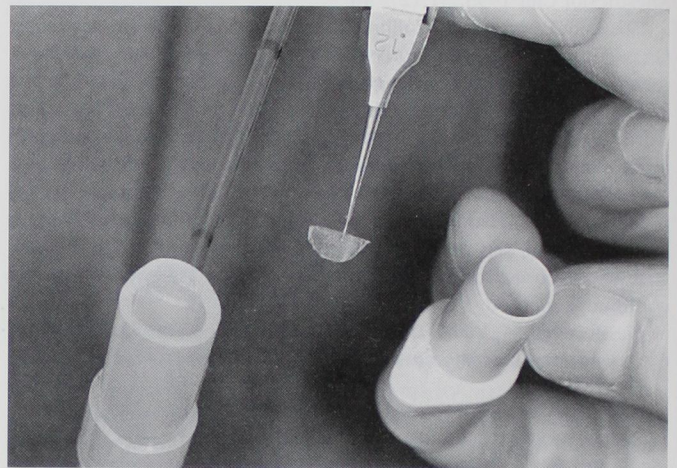


Fig. 1. The Univent® tube, the fragment, and the connector.

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References

1. Malhotra V, Bradley E: Broken inner sleeve of a Y-connector: Course of a circuit leak and a potential foreign body aspiration (letter). *Anesth Analg* 1993; 76:1169-70
2. Lim A: A leaking tracheal tube connector (letter). *Anaesthesia* 1992; 47:1106-7

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In Reply:—Fuji Systems Corporation originally supplied the Univent® tube with the 15-mm connector detached to allow anesthesiologists the option of cutting the tube to a shorter length.

We have noted that most anesthesiologists do not cut the length of the Univent® tube; therefore, we have already decided to supply the Univent® tube with the 15-mm connector attached.

This has been implemented to all units from the July production.

The complication Dr. Harioka writes about is a rare instance that will be remedied when the connector comes attached to the Univent® tube.

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