Another Cause of Obstruction in an Armored Endotracheal Tube

To the Editor:—We wish to call the attention of your readers to a previously unreported hazard of the disposable armored endotracheal tube (National Catheter Company).

Two patients bit their oral armored endotracheal tubes during postoperative ventilation in the intensive care unit. The wire spiral remained crushed and occluded the tube lumen in both cases. The photograph shows the almost complete obstruction that resulted. The patients were reintubated uneventfully with standard oral endotracheal tubes.

This problem has not been reported previously. It may be a hazard peculiar to the construction of the disposable armored tube of the National Catheter Company. It could be prevented by using a bite block, by nasotracheal intubation, or by avoiding the use of the armored tube in the awake, unparalyzed patient.

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In reply: The package insert for these tubes includes the precaution that “Use of kink resistant reinforced tracheal tubes should not routinely preclude application of a bite block.”

The reinforced tracheal tube was designed for use in the clinical situations shown in the “indications” section of the package insert, which states “The NCC Reinforced Tracheal Tube is intended for nasal/oral intubation and is indicated for use in airway management, especially those procedures requiring flexing of the neck or movement of the patient (e.g., to a lateral or prone position).” In these circumstances, the wire reinforcing will resist kinking. However, as the precaution reference above indicates, it was not intended that the tube would eliminate the need for a bite block for those situations in which a bite block would be used, e.g., with a non-paralyzed patient.

In view of the experience of the Royal Alexandra Hospital group, we plan to make the precaution quoted above more adequate by stating that a bite block should be used in cases where the patient may bite down on the tube.

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