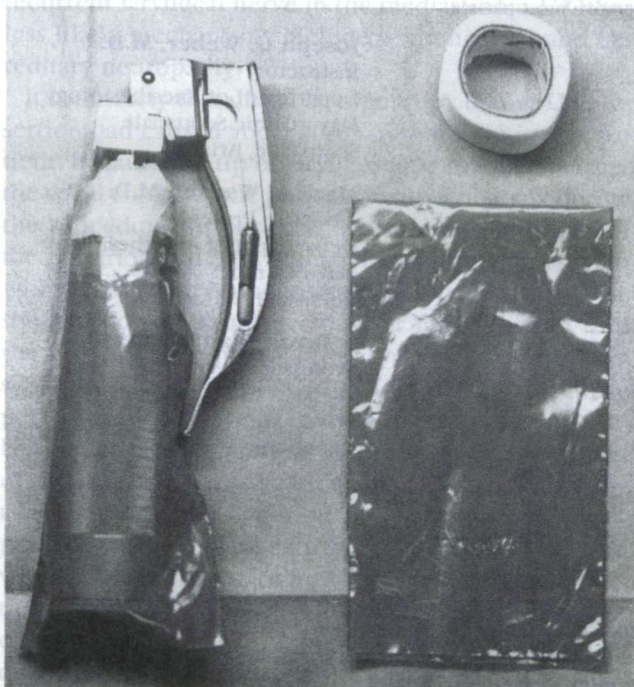


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## A Simple, Cost-effective Method of Preventing Laryngoscope Handle Contamination

As far as we know, this is the first case report of the occurrence of transient vocal cord paralysis after the use of an LMA. Among several causes for vocal cord paralysis after tracheal intubation, the most likely one is:

**To the Editor:**—A 1993 letter in ANESTHESIOLOGY documenting a high incidence of occult blood on laryngoscope handles<sup>1</sup> prompted our Department to address this source of potential contamination. Commercially prepared disposable products for handle protection



**Fig. 1.** GEM nonlatex medical bag as supplied and as used for a laryngoscope handle protector.

Furthermore, a case of bilateral hypoglossal nerve paralysis caused by an LMA.<sup>15</sup> In our case, because we detected erythema in the arytenoid region, this transient bilateral vocal cord paralysis is likely to be caused by direct compression of both the arytenoid region and interarytenoid muscles by the LMA. Likewise, because nitrous oxide can diffuse across the semipermeable membrane of the LMA cuff and increase the intracuff pressure by 38% in a 30-min interval,<sup>16</sup> such an increase in the LMA cuff pressure might

did not meet our needs for a number of reasons: (1) available products range in cost from \$0.90 to \$2.75 per unit; (2) many available products contain latex and, therefore, are not practical in our pediatric patient population because of the high incidence of risk of latex sensitivity; and (3) many commercially available products are difficult to apply.

We have been using a cost-effective method of protecting laryngoscope handles for more than a year. Small plastic bags, available from GEM Medical Industries, Inc. (Palatine, IL) for \$0.03 per unit can be placed over the laryngoscope handle. A piece of tape is used to secure the bag to the handle (fig. 1). Because the bag is manufactured from a supple plastic, the anesthesiologist's ability to securely grip the laryngoscope handle is preserved. At the completion of each case, the laryngoscope blade is sent for sterilization and the used bag removed and disposed of, after which a fresh one is secured in place. This is a cost-effective way to decrease the risk of laryngoscope handle contamination.

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### Reference

1. Morell RC, Ririe D, James RL, Crews DA, Huffstetler K: A survey of laryngoscope contamination at a university and a community hospital. ANESTHESIOLOGY 80:960, 1994

(Accepted for publication November 28, 1994.)

15. Nagai K, Sakuramido C, Goto F: Unilateral hypoglossal nerve paralysis following the use of the laryngeal mask airway. Anesthesiology 49:603-604, 1994
16. Lumb AB, Wrigley MW: The effect of nitrous oxide on laryngeal mask cuff pressure: In vivo and in vitro studies. Anaesthesia 47:320-325, 1992
17. Brimacombe J, Shoney N: The laryngeal mask airway and prolonged balanced anaesthesia. Can J Anaesth 40:360-363, 1993
18. Brimacombe J, Berry G: Laryngeal mask airway cuff pressure and position during anaesthesia lasting 1-2 hours. Can J Anaesth 41:589-593, 1994