

REFERENCES

1. Alvis JM, Reves JG, Govier AV, Menkhaus PG, Henling CE, Spain JA, Bradley E: Computer-assisted continuous infusion of

fentanyl during cardiac anesthesia: Comparison with a manual method. *ANESTHESIOLOGY* 63:41-49, 1985  
2. Maitre P, Vozek S, Stanski D: Computer-assisted infusions of drugs (letter). *ANESTHESIOLOGY* 65:344-345, 1986

(Accepted for publication September 17, 1987.)

Anesthesiology  
68:167, 1988

Endotracheal Intubation Assisted with a Pencil Torch

*To the Editor:*—Often, during tracheal intubation, the light on the laryngoscope fails at the moment of laryngeal visualization for such reasons as poor electrical contact between the blade and the handle or bulb and electric line, a broken bulb, or a weak battery, etc. Usually, a spare laryngoscope is not available and, even if so, optimal conditions for intubation are soon lost. We have used a pencil torch in such a situation and successfully intubated the trachea (fig. 1). We have trained our residents in this technique over the past 25 yr, and it has been used by them on many occasions. We urge that this measure be a part of the intubation technique in a training program for residents.

YUKIO KUBOTA, M.D.  
*Chief*

YOSHIRO TOYODA, M.D.  
*Associate Chief*

HIROSHI KUBOTA, M.D.  
*Staff*

*Department of Anesthesia  
Osaka Kohseinenkin Hospital  
4-2-78, Fukushima  
Fukushima-Ku, Osaka, Japan 553*

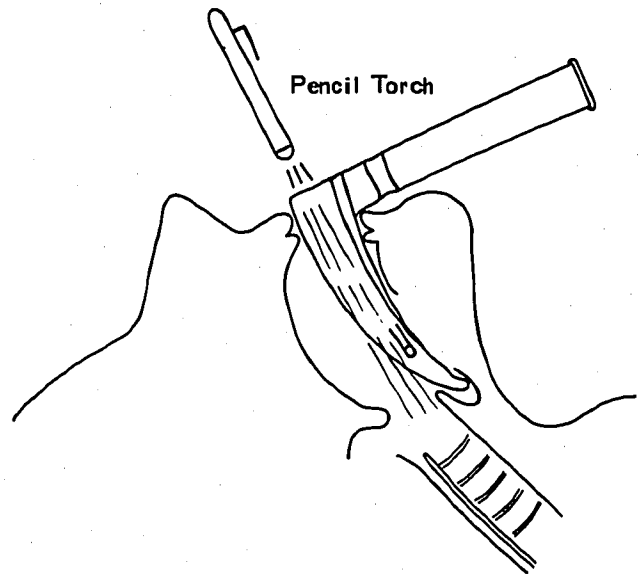


FIG. 1. An assistant holds the pencil torch and direct illumination of the vocal cords is easily accomplished.

(Accepted for publication September 17, 1987.)

Anesthesiology  
68:167-168, 1988

Nitrous Oxide and Endotracheal Tube Cuff Leaks

*To the Editor:*—It is well known that nitrous oxide will diffuse into and enlarge an endotracheal tube cuff.<sup>1</sup> Anesthesiologists are aware of the need to remove volume from the cuff as the gas within it equilibrates with the nitrous oxide tension in the blood to prevent excessive cuff pressure or volume. In a patient whose trachea remains intubated postoperatively, the reverse occurs, *i.e.*, nitrous oxide diffuses out of the cuff.

On several occasions, I have been called to the intensive care unit because of a "cuff leak," approximately 1-2 h after a patient has been transferred from the operating room. Typically the complaint is, "There must be a slow leak—we've had to keep adding air to the cuff." Injection of a few ml of air has resulted in a good seal, suggesting that the leak arose because nitrous oxide in the cuff had diffused back out. In critically ill