

Fig. 1. The 18-gauge metal cannula is shown positioned in a nasal prong to monitor end tidal carbon dioxide, as well as separately.

air also (fig. 1). Because the 18-gauge cannula is blunt, retrograde insertion into the cannula prong opening facilitates the creation of the desired perforation site in the cannula tubing wall. The 18-gauge cannula is then removed, turned  $180^\circ$ , and reinserted into the created perforation to clinically monitor expired carbon dioxide. The blunt,

stiff metal shaft closely matches prong length, prevents kinking, protects against finger-stick injury during insertion, and will readily/atraumatically retract to within the nasal cannulae, should the tip press against nasal mucosa. The length of 18-gauge protrusion from the nasal cannulae (different manufacturers) can be securely minimized if desired *via* tape application to the oxygen tubing or 18-gauge hub, or both. The 18-gauge cannula can be repeatedly reinserted without problem if dislodged to provide safe, cost-effective, single-use, and consistent carbon dioxide sampling during oxygen administration via nasal cannula.

Paul Kempen, M.D., Ph.D.

Associate Professor
Department of Anesthesiology
University of Pittsburgh School of Medicine
200 Lothrop Avenue
UPMC Presbyterian Hospital
Suite B 208.7
Pittsburgh, Pennsylvania 15213
Pkempe@POL.NET

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(Accepted for publication September 21, 1998.)

Anesthesiology 1999; 90:634 © 1999 American Society of Anesthesiologists, Inc. Lippincott Williams & Wilkins, Inc.

## Jetting Lidocaine through the Atomizer

To the Editor:—Using the atomizer to deliver local anesthesia to the larynx is common, and one common variation is to deliver high-flow oxygen through the atomizer. We have tried something different, by connecting a jet ventilator hose to the atomizer and setting the jet pressure at 5–10 psi. The atomizer mist thus produced is forceful and can be adjusted by altering the pressure of the jet. The length of the jet tubing should be adequate to reach patients who are bedridden, and who have restricted mobility because of an unstable cervical spine and traction. We have used this technique several times; it works, and it seems to be a reasonable alternative method for using the atomizer to deliver topical anesthesia to the larynx.

Davinder S. Garewal, F.R.C.A., M.R.C.P. Assistant Professor Ajeet Sharma, M.D. CA3 Resident

**Thomas Smith** 

Senior Manager, OR Support Services Department of Anesthesiology University of Texas Room 5.536, MSMB Fannin 6431 Houston, Texas 77030 dgarewal@anes1.med.uth.tmc.edu

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(Accepted for publication October 12, 1998.)