

The proper application of the principles of trans-laryngeal cannula ventilation can provide adequate oxygenation and ventilation, and represents a valuable alternative in emergency settings. The use of cannulae of 14 gauge or larger, connected to O₂ sources of 50 psi or greater, will maintain adequate oxygenation and ventilation. The equipment needed is not expensive nor difficult to obtain. It has been previously shown that each operating room can be easily outfitted with the proper materials,^{7,11} and nothing short of this should be acceptable. We should be prepared for all emergency situations and be satisfied only when the best possible methods are used in all patients. If we depend on ingenuity in the time of crisis instead of planned alternatives, we may fail our patient.

DONALD M. YEALY, M.D.

University of Pittsburgh Affiliated Residency in Emergency Medicine

RONALD D. STEWART, M.D., F.A.C.E.P.

*Professor and Chairman
Division of Emergency Medicine
Associate Professor
Department of Anesthesiology*

*University of Pittsburgh School of Medicine
Suite 113, Lothrop Hall*

Anesthesiology
67:446, 1987

On Gildar's Transtracheal Ventilation System

To the Editor:—The device described by Reich and Schwartz¹ using readily available equipment for emergency transtracheal ventilation has been previously described by Gildar.² The simplicity of this technique, consisting of the barrel of a 10–15-cc syringe attached to the transtracheal catheter with a cuffed endotracheal tube inserted into the barrel, has much to recommend it, and the credit should go to Dr. Gildar.

MITCHEL SOSIS, M.D., PH.D.
Assistant Professor of Anesthesiology

Anesthesiology
67:446–447, 1987

In Reply:—We appreciate the obvious interest and experimental work of Drs. Yealy and Stewart in the area of transtracheal ventilation. However, there are several points that must be clarified. Firstly, the endotracheal tube-syringe barrel device that Gildar described¹ is strictly for transtracheal oxygenation, *not* for transtra-

*190 Lothrop Street
Pittsburgh, Pennsylvania 15213*

REFERENCES

1. Reich DL, Schwartz N: An easily assembled device for transtracheal oxygenation (letter). *ANESTHESIOLOGY* 66:437–438, 1987
2. Spoerel WE, Narayann PS, Singh NP: Transtracheal ventilation. *Br J Anaesth* 43:932–938, 1971
3. Jacobs HB: Emergency percutaneous transtracheal catheters and ventilator. *J Trauma* 12:50–56, 1972
4. Dobbins TL, Whalen J, Pelton DA, et al: Needle tracheostomy: A laboratory study. *Anaesth Intensive Care* 8:72–81, 1980
5. Millar WL: Management of a difficult airway in obstetrics. *ANESTHESIOLOGY* 52:523–524, 1980
6. Neff CC, Pfister RC, Van Sonnenberg E: Percutaneous transtracheal ventilation: Experimental and practical aspects. *J Trauma* 23:84–90, 1983
7. Scuderi PE, McLeskey CH, Comer PB: Emergency percutaneous transtracheal ventilation during anesthesia using readily available equipment. *Anesth Analg* 61:867–870, 1982
8. Ravussin P, Freeman J: A new transtracheal catheter for ventilation and resuscitation. *Can Anaesth Soc J* 32:60–64, 1985
9. Attia RR, Battit GE, Murphy JD: Transtracheal ventilation. *JAMA* 234:1152–1153, 1975
10. Dorsch JA, Dorsch SE: *Understanding Anesthesia Equipment: Construction, Care, and Complications*. Baltimore, Williams and Wilkins, 1984, pp 65–66
11. DeLisser EA, Muravchick S: Emergency transtracheal ventilation. *ANESTHESIOLOGY* 55:606–607, 1981

(Accepted for publication May 20, 1987.)

*Jefferson Medical College
Thomas Jefferson University
Philadelphia, Pennsylvania 19107*

REFERENCES

1. Reich DL, Schwartz N. An easily assembled device for transtracheal oxygenation. *ANESTHESIOLOGY* 66:437–438, 1987
2. Gildar JS. A simple system for transtracheal ventilation. *ANESTHESIOLOGY* 58:106, 1983

(Accepted for publication May 7, 1987.)

cheal ventilation. Frumin, Epstein, and Cohen demonstrated in 1959 that apneic oxygenation can be maintained for periods of 18–55 min.² Although hypercarbia and acidosis resulted, the lowest arterial oxygen saturation obtained was 98%.

Drs. Yealy and Stewart suggest that cannulae with