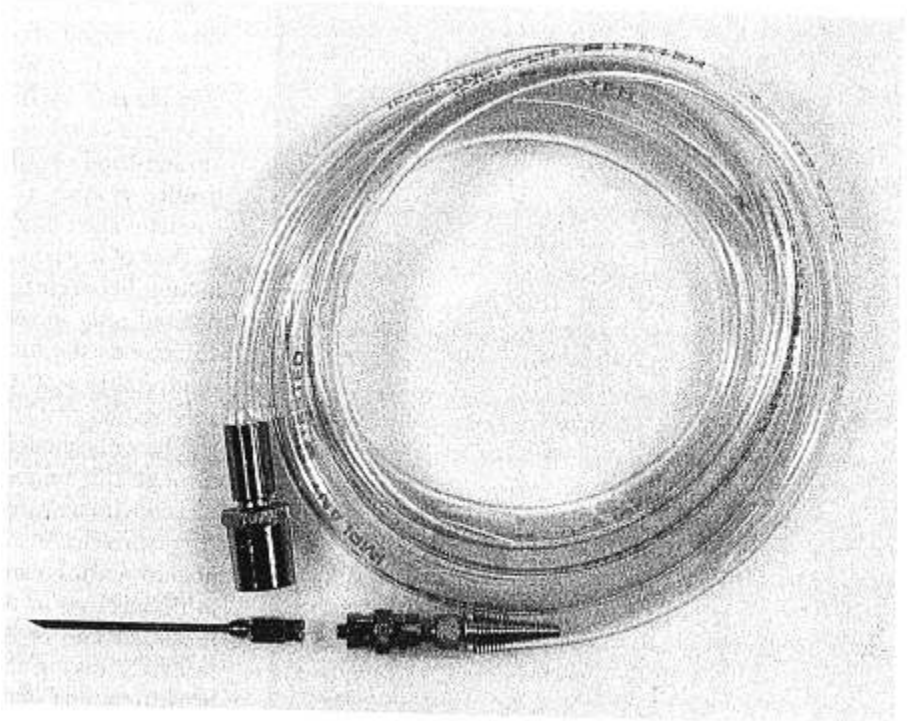


FIG. 1. Tubing and needle set with anesthesia machine adapter for transtracheal ventilation.



fresh gas outlet of our Ohio® anesthesia machines (fig. 1). Spare Foregger® outlet fittings are used for our Foregger® machines. We have attached a sterile, packaged tubing set and 13-gauge Luer-lok needle under the monitoring shelf of each of our anesthesia machines. When no other means of ventilation is possible, transtracheal ventilation can be accomplished following needle puncture of the cricothyroid membrane and verification of proper placement with a syringe. After connection of the needle to the tubing set, activation of the oxygen flush valve achieves positive pressure lung inflation. When the oxygen flush valve is released exhalation occurs passively during the interval between oxygen injections. This is possible because the obstruction in the upper airway is most likely due to a valve-like effect and not a total obstruction. Rather than depend upon on-the-spot ingenuity<sup>4</sup> during airway management emergencies, we have a quick, simple means for implementing transtracheal ventilation available on each anesthesia machine.

EVERARD A. DELISSER, M. D.  
*Chief Anesthesiology Service  
Miami VA Medical Center and  
Department of Anesthesiology  
University of Miami School of Medicine  
Miami, Florida 33101*

STANLEY MURAVCHICK, M.D., PH.D.  
*Associate Professor of Anesthesiology  
University of Pennsylvania School of Medicine  
Philadelphia, Pennsylvania 19104*

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Anesthesiology  
55:607-608, 1981

### A Low Cost, Comfortable and Effective Anesthesia Earpiece

*To the Editor:*—Continuous monitoring of heart and breath sounds is a routine practice during anesthesia. Medical personnel specializing in the practice of anes-

thesia generally have custom-fitted earpieces for this purpose. These are relatively expensive, \$15.00-\$25.00, and require two to four weeks to be manufactured after fit-

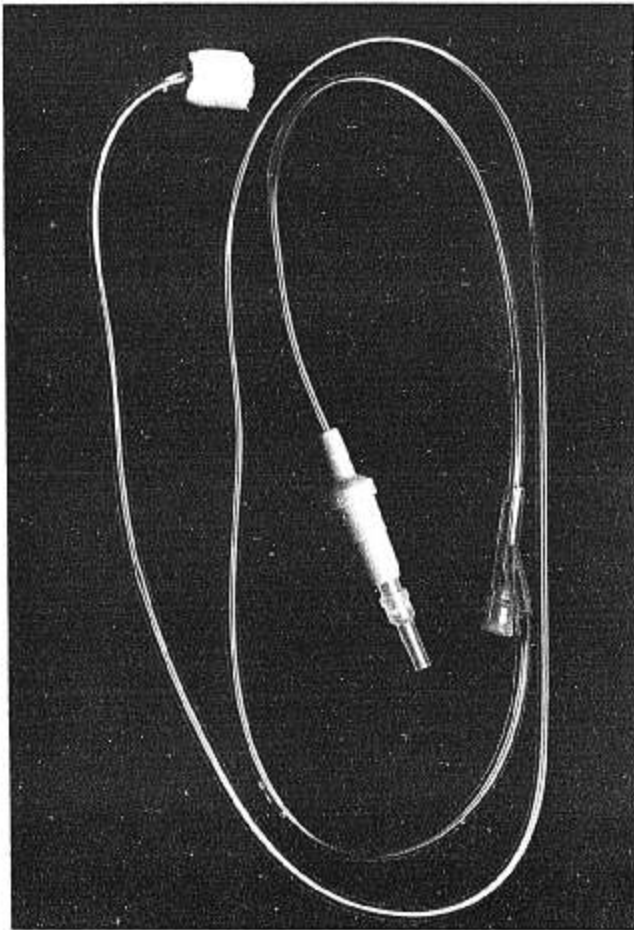


FIG. 1. A low cost, comfortable and effective anesthesia earpiece.

ting. Few, if any, anesthesia departments can afford to provide these for temporary personnel, such as medical students and surgical residents rotating on the anesthesia service. These personnel have to use makeshift earpieces that are inconvenient, ineffective and/or uncomfortable.

Anesthesiology  
55:608-609, 1981

As an avid hunter and shooter, I have been using various sound attenuating devices to protect my ears while shooting. One such device, a PVC foam earplug (Decidamp® by Norton Sound Products) that conforms to the ear canal, seems ideal after minor modification for an anesthesia earpiece. The plug, a cylinder, when expanded is approximately 1 cm in diameter and 2 cm in length. When compressed the diameter is 1-2 mm. The method of insertion is to compress the foam with a rolling motion between the fingers and then to insert the compressed plug in the ear canal. After approximately 30-45 seconds the foam has expanded to form an airtight, comfortable seal. Once inserted, the position is reasonably stable.

The only modification required to the plug is a hole through the long axis of the cylinder. This can easily be placed with a heated 8 d nail or similar sized metal object. A cut piece of disposable iv tubing is then placed in the hole to within about 1 mm from the edge of the earplug to be inserted in the ear. The addition of a stopcock to the other end of the iv tubing provides a means of alternately taking the BP and listening to the heart and breath sounds via an esophageal or chest stethoscope. The tubing can be cemented to the earpiece with a small amount of cyanoacrylate glue (fig. 1). The total time for manufacture is about five minutes, if all materials are at hand. The retail cost of the earplugs is \$0.50 a pair at this time.

The students and surgical residents who have tried this earpiece have been pleased with its performance and comfort.

PETER C. SWENSON MD  
Clinical Assistant Professor  
University of Texas  
San Antonio, Texas 78284

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### Filth, Filters, Fish and the Common Man

*To the Editor:*—The May 1981 issue of our journal has been a personal triumph for me. Three cheers for dirt. My mother wuz right: ya gotta eat (or inhale, etc.) a peck of dirt before you die! (sic)

Now I'll admit that I tend to exaggerate. That's probably why so few of my letters ever get published. Nobody, including journal editors, likes to get slapped across the face with a fish, especially by some punk from Nowheresville who comes up with an idea or study (like my study on arterial lines which you rejected, although

you later published a similar study by someone else.) That same principle goes for local medical colleagues, from other anesthesiologists all the way down to internists. I've always been pro-dirt. Regardless.

Therefore, the issue in question, which suggests that filters (air, blood, IV, etc.) might be a waste of money and cure no diseases known to man, did my heart good. Some of my local colleagues will soon be busy looking for any article to refute this issue, but we got 'em on the run.