A Simple Device for Filtering Mouth-to-Mouth Resuscitation

To the Editor:—It is well known that people refrain from mouth-to-mouth resuscitation for obvious reasons. Several devices have been put on the market (some still are) to obviate this problem, with more or less success.

Our device is inexpensive and is made of disposable plastic parts easily attainable from the anesthesia and respiratory therapy departments. It can be used by any individual, regardless of the victim’s position and location and size of the rescuer. It consists of the following parts: 1) mask, transparent, preferably plastic; 2) T-tube; 3) filter; 4) connector; 5) 50-cm corrugated tubing; and 6) mouth piece (fig. 1).

Considering Murphy’s law, we intentionally eliminated the exhaust valve; nothing mechanical can go wrong. The system can be used with or without the extension. The T-tube is occluded with one finger during patient inspiration, and the finger acts as a valve to allow the patient to exhaust the air. The filter protects both the victim and the rescuer. With a little practice and a few dollars worth of disposable equipment, we found this device extremely useful and dependable, and it was well accepted by all professional personnel to whom we have shown it.

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Management of Children for Surgery

To the Editor:—Dr. Brzustowicz and his colleagues, in their excellent article on premedication in children, state that, while postoperative behavior problems resulting from a stormy anesthetic induction can be diminished by psychologic preparation, premedication may be more reliable. Many authors have failed to demonstrate the superiority of sedatives or anxiolytics in increasing the frequency of satisfactory preanesthetic behavior (table 1). Indeed, Doughty showed that only in unsedated children does the frequency of satisfactory behavior

| TABLE 1. Comparison of Percentage of Children with Satisfactory Behavior before Induction |
|------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Meperidine                               | Placebo                       | Trimeprazine                  | Hyoscine                      | Atropine                      | Morphine                      |
| Diazepam                                 | Atropine                      |                                | Atropine                      | Morphine                      | Penazocine                    |
| Atropine                                  |                                | Hyoscine                      | Atropine                      | Morphine                      | Diazepam                      |
| 73                                        | 62                            | 71                            | 73                           | 81                            | 59.4                          |
| 62                                        | 71                            | 73                            | 81                           | 59.4                          | 80                            |
| 73                                        | 81                            | 59.4                          | 80                           | 81                            | 88                            |
increase with age. Beeby\textsuperscript{a} confirmed the finding that children aged older than 7 years have improved behavior. They also showed that without premedication, a well-defined management from admission to operating room produced an incidence of satisfactory behavior equal to many trials of sedative premedication. Interestingly, in this study there was no difference in the satisfactory response to induction whether an experienced attending anesthesiologist or inexperienced resident gave the anesthetic.

In Dr. Bzustowicz's study, he reports a 19% incidence of crying on arrival in the operating room. This is extremely high. If one accepts "mildly anxious" or "cooperative" as satisfactory behavior, only 73% of children receiving the premedication had satisfactory demeanor before anesthesia compared with 62% of children who were given placebo (compare with table 1). Statistical significance is not reached with such small numbers.

We would suggest that in any trial of premedication, the preparation and social management of the child from admission to hospital until induction of anesthesia is perhaps more important than the actual sedative or anxiolytic drug used; the need for careful preoperative preparation and gentle handling of parents and the child cannot be overemphasized.

\textbf{REFERENCES}


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\textbf{Percutaneous Radial Artery Cannulation Using a Pressure-curve-directed Technique}

\textit{To the Editor:—} Percutaneous radial artery cannulation (PRAC) can be difficult especially when vasoconstriction, atheroma, or local spasms with or without hematoma are evident. The pressure-curve-directed technique is designed to permit percutaneous radial artery cannulation in these difficult situations. The entire pressure monitoring system, including a catheter with needle, is assembled and flushed thoroughly with heparinized saline. The (right handed) operator identifies the pulse with the (left) index and middle fingers. He or she then proceeds with PRAC using a standard technique.\textsuperscript{1} Gentle taps over the advancing needle tip by the (left) index finger elicit a wave form on the oscilloscope, representing the tissue pressure change (fig. 1A). This maneuver and the presence of tissue pressure curve is essential to assure that the entire monitoring system is functional. The needle is then advanced slowly while one observes the oscilloscope screen. When the needle tip enters the arterial lumen, the arterial pressure curve instantly will be displayed on the screen (fig. 1B). The needle is advanced an additional 0.5–1 mm, then immobilized while the enveloping catheter is slid over the needle, all the time with the observation of the continuous presence of the pressure trace. Once the catheter is advanced fully, the needle is withdrawn (fig. 1C) and the linkage to the monitoring system is reattached to the indwelling catheter (fig. 1D). We have been utilizing this technique in the past 8 years with satisfactory results even among patients who are in shock and have no palpable pulse, thus totally eliminating the necessity of any "cutdown."