

## Introducer for the Cheng Epidural Needle

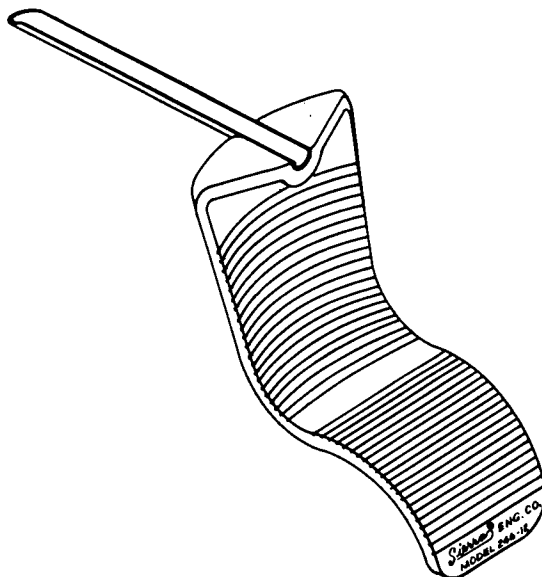
PETER A. CHENG, M.D.\*

The main difficulty with the Cheng epidural needle is the insertion of the needle into the epidural space. This is due to the fact that the needle sometimes misses the track made by a 15 G. sharp needle.

The introducer is in the form of a groove with a sharp point which can puncture the skin and allows insertion of the introducer to the infra-spinal ligament. The blunt epidural needle can be inserted into the groove of the introducer and puncture through the ligamentum flavum into the epidural space without difficulty.

The groove of the introducer is 3 cm. in length. It is an optimum length for the lower thoracic and lumbar spine because the ligamentum is thick. However, for upper thoracic spinal puncture with the introducer, the length should be adjusted, because the ligamentum is not thick.

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## Equipment for Respiratory Resuscitation

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For general resuscitation purposes in the Accident Room and on the wards of Baltimore City Hospitals we have been using the large size (5 liter) Pulmonator bag (Western Anesthesia Equipment Co., Palo Alto, California). A smaller size of the same model was used on pediatric wards.

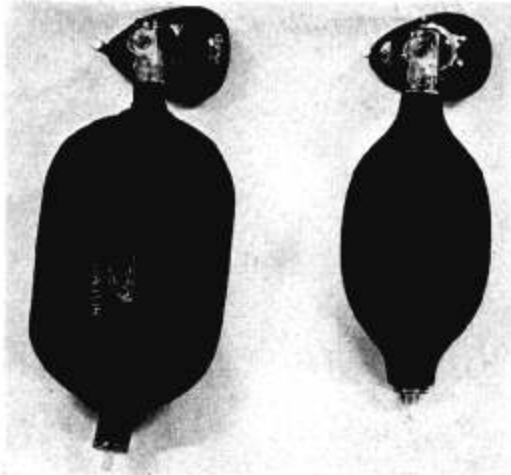
The Company recently has changed its product to a small-size "neoprene" shell. We would like to draw the attention of our colleagues to this change, because we feel the usefulness of the product is thereby significantly diminished. This new product is more robust and refills faster, but a single-hand squeeze delivers

much less air per breath than the models which it displaces. The values below represent the average single-hand squeeze of a number of observers, measured by a Wright Respirometer attached to the patient outlet of the valve.

Bag	Single Breath Volume
Old model, large	2,000 ml.
Old model, small	1,250 ml.
New model	650 ml.

This reduction in volume would be unimportant in the hands of those who can make a tight mask fit on a victim's face, or where the unit is connected to a cuffed endotracheal tube. In our hospital these units are primarily

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"Pulmonator" bags, Western Anesthesia Equipment Co. *Left*, old model; *right*, new model.

used by non-anesthesiologists who are not expert in using a mask, and who sometimes even apply a mask upside down. Thus, in practice, there are frequently major leaks around the mask. If this is the case it may be impossible to ventilate a victim adequately using the new model: only a volume equal to dead space may be given to the patient. The large size bag of the old model could deliver plenty of air to ventilate a patient's lungs in spite of major air leaks.

One other point is that the new model is quite stiff, and cramps in the hand and forearm of the rescuer occur early in resuscitation.

A recent communication from the Company indicated that another model is under development which might eliminate the above objections.

### Modification of Crowe-Davis Gag

WALLACE H. RING, M.D.\*

A new modification of the Crowe-Davis tongue depressor is described. Although reports in British literature of attempts to place the endotracheal tube between the tongue and tongue depressor go back almost twenty years, this approach has only recently been of interest in the United States. This has been accomplished in the past by devising slotted and grooved blades, the most widely reported being the "Doughty" blade (Doughty, A.: *Brit. J. Anaesth.* 29: 407, 1957). A similar blade was reported (Modification of the Crowe-Davis Mouth Gag, *ANESTHESIOLOGY* 22: 494, 1961). The modification which I wish to report is different in that the groove extends the full length of the blade, opening to the front through a slot in the vertical shank. This enables insertion of the depressor over the tube without the necessity of disengaging the

endotracheal tube from the anesthetic machine. The endotracheal tube can thus be taped in place prior to insertion of the mouth gag. Once the gag is opened pressure against



View of the blade in a McIvor gag. A relatively long portex endotracheal tube is curved to the left and up. Tube is taped to chin only.

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