

pothesized that the effects of the sunlight on the trichloroethylene produced products of decomposition which caused this sensory loss. It was further hypothesized that perhaps the relief of the pain of *tic douloureux*, for which patients inhale small carpules of the trichloroethylene, may be due to production of these decomposition products. A fresh bottle of trichloroethylene was secured and self-administered analgesia continued for the remainder of the patient's terminal course, as needed. The sensory loss did not fully regress, but was considered a minor complication by the patient when compared to the analgesia afforded by the inhalation of the trichloroethylene vapor.

Although, admittedly, the number of patients presented is small, it is thought that

the technique might be tried in selected cases where the use of narcotics is excessive or producing undesirable side reactions such as nausea and vomiting.

REFERENCES

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A SIMPLE CONNECTOR FOR DOUBLE LUMEN TRACHEOBRONCHIAL CATHETERS

One problem connected with the use of the Carlens' catheter is represented by the difficulty of adapting the tube to the "Y" piece of the anesthesia apparatus. This point has been emphasized by Beer (1), who devised a connector made especially for this purpose.

The need for a double lumen adapter is outstanding in view of the comparatively narrow internal diameter of both lumina of the Carlens' tube and of the possibility that one-lung ventilation with this type of catheter may be inadequate and result in carbon dioxide accumulation. Also, the surgeon occasionally requires positive pressure to be applied to the lung on the operated side; when using a double lumen catheter this is not practicable if a double way connector is not available, unless gas flow from a second machine is resorted to—a rather complicated and unphysiological compromise.

A connector such as that proposed by Beer appears to have 2 disadvantages: (1) it increases dead space and (2) its size, weight, and rigidity may cause trouble, especially with the patient in the lateral or prone position.

We have developed a simple "home-

made" adaptation, the use of which in our hands has proved very satisfactory and useful. The necessary parts are: (1) a medium-sized Cobb's type of endotracheal adapter (internal diameter, 7 mm.); (2) one of the simple short metal connectors which are supplied with Carlens' catheters; (3) a piece of unkinkable, curved rubber tube, about 3 inches long and with an internal diameter of 7 mm. (see fig. 1, A and C).

The angular piece is connected to the lumen which communicates with the unoperated lung. When one-lung ventilation is required, a rubber cork is inserted in the head of this connector and the situation is the same as when using single-lumen catheters (see fig. 1, B).

If ventilation of both lungs is required, the rubber tube is connected with one end directly to the head of the angular connector and with the other end by means of the short straight metal connector to the lumen which communicates with the operated lung (see fig. 1, D).

Aspiration through both lumina is possible whenever required.

During ventilation of both lungs with

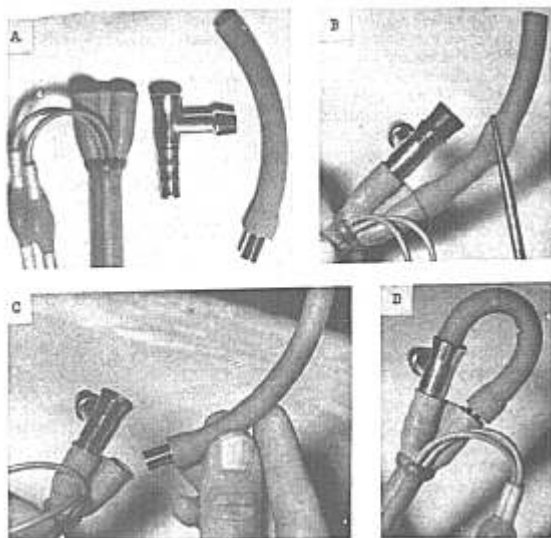


FIG. 1.

this type of connector, gas current to the operated lung must be somewhat different from the opposite side, but this difference presumably is not of a significant degree and increase of dead space is very slight.

This simple appliance is light and its use in the various operative positions does not require more care than the usual adapters for single lumen catheters.

REFERENCE

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A NEW INDICATOR FOR SPINAL EPIDURAL ANALGESIA

Spinal epidural analgesia is gaining ever-increasing application in modern surgery, especially in gynecology and urology, but the technical difficulty of locating the epidural space still remains the greatest deterrent to using this method.

Many techniques and appliances have been devised to assist in finding the epidural space. One group of techniques is based on the observation that there is a moderate negative pressure in the epidural

space. The hanging-drop method of Gutierrez and Odom's indicator fall in this group, but they are reliable guides in only about 85 per cent of cases (1). A second group is based on the loss-of-resistance test (the "Mandrin liquide") of Sicard and Dogliotti, puncture being made while constant pressure (by manual or mechanical means) is applied to the plunger of a charged syringe. Macintosh's balloon-indicator is based on this