was small compared with that observed in the original group of patients; the cause of their glandular swelling remains unknown.

We have been unable to find any reports of others who have observed sialadenopathy during general anesthesia. The only remote association is the observation of Hall et al., who noted brawny edema affecting the soft tissues of the lower jaws in three boars of a single litter who received 100 mg. succinylcholine intravenously. Since this was accompanied by violent convulsions, an atypical response in this species, the edema and convulsions were ascribed to an unusual genetic pattern in the litter.

REFERENCES

An Acoustic Switch for Use in Constant Monitoring

WILLIAM R. PLOSS, M.D.*

A dual stethoscope attached to a molded monaural earpiece to monitor both pulse and blood pressure continuously was described in 1955. This system has gained considerable acceptance because it is simple, inexpensive and reliable. It has been recommended that the device "should be a part of the armamentarium of all anesthesiologists." The cardiac pulse pickup is either a conventional stethoscope chest piece positioned over the precordium or an esophageal pickup. The pulse pickup used is connected to one arm of the Y piece and the blood pressure pickup is connected to the other arm. A monaural earpiece makes the third connection to the Y. When taking the blood pressure, the anesthesiologist either clamps the pulse pickup tubing or uses a simple three-way stopcock as a valve.

We have recently improved this device by designing a simple and inexpensive valve that frees the anesthesiologist's hands. On blood pressure cuff inflation, the valve automatically blocks the acoustic pathway of the cardiac pulse pickup and allows reception of Korotkoff sounds. On cuff deflation, cardiac pulse sounds return automatically (figs. 1 and 2). No valve

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Fig. 1. Isometric drawing of assembled valve.

Fig. 2. Schematic drawings of top and bottom sections of valve. Dimensions are not critical. Any size neoprene ring may be used, the valve machined to fit. Original valve was 1 1/4 inches outside diameter with a 3/4 inch inside diameter by 1/8 inch neoprene ring.

Fig. 3. Assembly of "Y" R. E. Ploss Constant Monitor System with valve in place.

provides a rapid means of repeated blood pressure readings and continuous pulse monitoring at much less than the cost of similar systems now available. It has no maintenance problems and needs no electrical power source.

The valve, made from acrylic or aluminum with stainless steel tubing connections, is light and durable. It is less than 1 1/2 inches in diameter. The recommended minimum internal diameter of the tubing and acoustic paths is...
A Means of Recording Force of Thumb Adduction

LEONARD F. WALTS, M.D., MARTIN LEBOWITZ, M.D.,
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The common use of the nerve stimulator to monitor muscle relaxation has brought with it the desire to obtain a written record of the muscle response. We suggest a simple technique that has proved satisfactory for making such a recording.

Our basic instrument is a Grass FT.03 transducer, an instrument previously suggested by Katz. To attach the transducer to the hand with reasonable security we have added a rubber bicycle handlebar grip. A wire wound from the grip about the transducer holds the two together. Next to the lug of the cantilever of the transducer, we have placed a small cradle cut from a piece of pipe. This cradle is attached by means of a 4-40 screw which fits the already-threaded lug. The components are shown in figure 1 and the completed assembly in figure 2.

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**Fig. 1.** Components of the monitoring device.

**Fig. 2.** The assembled components.

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References


