

been "fixed" in myoneural junctions and is therefore available for paralyzing the "protected" muscle. If the interval between release of the cuff and the onset of a convulsion is too long, sufficient paralysis may take place so as to prevent the seizure's being apparent.

After the first controlled convulsion has been achieved, the dose of SDC on subsequent treatments can be progressively reduced by 5 mg. increments until mild convulsive movements can be detected in the "unprotected" leg. Such a titration procedure has at least two advantages. First, it prevents unnecessarily excessive dosage of SDC. Second, it is a safeguard in case the blood pressure cuff became deflated or unwrapped prematurely. With large excesses of SDC, all muscles will be paralyzed and the motor component of the seizure may be obliterated. However if the patient has been titrated as recommended above, a satisfactory, though small, seizure will occur.

The dose of SDC necessary to obliterate convulsive muscle activity completely in the "unprotected" extremities has ranged from 85 to 150 mg. In view of the sensible admonitions in the literature against overdosing with SDC, cardiac rate and rhythmicity have been monitored and, in some of the patients getting the larger doses, blood pressure responses have been assessed. However, in the patient premedicated with adequate doses of atropine, no untoward reactions to these relatively large doses have been encountered in this series. The duration of apnea accompanying these doses is very little, if any, prolonged beyond that occurring with smaller doses which are sufficient to produce significant attenuation of the motor component of the seizure.

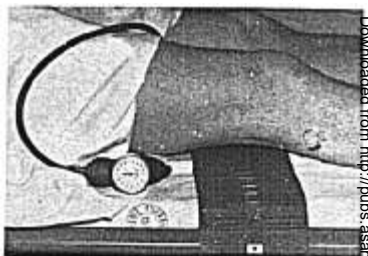


FIG. 1. Placement of blood pressure cuff. Inflatable section of cuff is placed in popliteal fossa proximal to head of fibula and lateral popliteal nerve.

The dose of SDC employed in the initial treatment is determined by two considerations: the patient's muscle mass and the danger inherent in underestimating the dose and thereby getting convulsive movements in the "unprotected" muscles. In patients weighing 60 kg. or less, a minimum dose of 85 mg. of SDC is administered. If it is essential that no convulsive movements occur in the "unprotected" muscles or if the patient weighs more than 60 kg., the initial dose can be increased to 100 mg. or more.

Although designed primarily for the poor- or special-risk patient, this technique has been employed for all patients receiving ECT at this hospital in the past year. During this period, 1,165 treatments have been administered to 152 patients. Nineteen patients, aged 70-79 years were given a total of 130 treatments; 5 patients in the 80-85 year age group received a total of 19 treatments.

### Radiation Exposure

Drs. Francis Le Tard and Charles D. Bel-leau of the Ochsner Foundation Hospital in New Orleans have determined the amount of radiation to which the anesthesiologist is exposed during a period of one year.

**Method.** Roentgen-ray badges were worn constantly by six Fellows in anesthesiology on the breast pocket of their scrub suits for one

year. No lead apron or other protective device was employed during this time. Additional, separate badges were worn for each of the following procedures: pneumoencephalography and ventriculography, cystography, bronchography, angiography, hip nailing, and cholangiography. The badges were analyzed periodically. (The maximum permissible dose

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