

We have used this device in more than 100 anesthetics, and it has worked well in all cases. At present this box is not made commercially.

M. SAEED DHAMEE, M.D.
Assistant Professor
Department of Anesthesiology
The Medical College of Wisconsin
8700 West Wisconsin Avenue
Milwaukee, Wisconsin 53226

JAMES JABLONSKI, B.S.
Biomedical Engineer
Department of Anesthesiology
Milwaukee County Medical Complex
8700 W. Wisconsin Avenue
Milwaukee, Wisconsin 53226

(Accepted for publication May 15, 1979.)

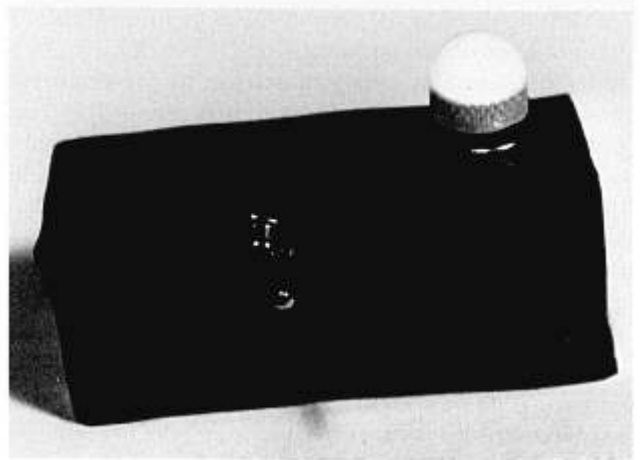


Fig. 1. Light box.

Anesthesiology
51:475, 1979

Placental Transfer of Nitroglycerin

To the Editor:—In a recent case report,¹ prolonged depolarization neuromuscular blockade following administration of trimethaphan and succinylcholine in a pre-eclamptic parturient was explained on the basis of cholinesterase inhibition by trimethaphan. (The baby was unaffected.) It was suggested that alternative drugs such as nitroglycerin be considered for parenteral treatment in hypertensive pregnant women. There is, however, a significant difference in molecular weights and consequent predicted placental transfers between these two antihypertensive drugs.² Trimethaphan, with a molecular weight of 597, should have rather limited transmission across the human placenta, whereas nitroglycerin, with a molecular weight of 227, would be expected to cross readily and thereby decrease the baby's blood pressure in a manner similar to the mother's. Abnormally low blood pressures have been demonstrated in non-depressed newborns following administration of hydralazine (molecular weight 160) therapy to mothers.³ Neonatal hypotension is undesirable because it interferes with the normal changeover from fetal to adult cir-

ulation. We therefore believe that the safest solution to the problem is not a change in antihypertensive drug, but a decrease in succinylcholine dosage combined with continuous monitoring of neuromuscular activity by means of a nerve stimulator.

SALVADOR F. DIAZ, M.D.
Resident in Anesthesiology
GERTIE F. MARX, M.D.
Professor of Anesthesiology
Department of Anesthesiology
Albert Einstein College of Medicine
Bronx, New York 10461

REFERENCES

1. Poulton TJ, James FM, Lockridge O: Prolonged apnea following trimethaphan and succinylcholine. *ANESTHESIOLOGY* 50:54-56, 1979
2. Mirkin BL: Perinatal pharmacology: Placental transfer, fetal localization, and neonatal disposition of drugs. *ANESTHESIOLOGY* 43:156-170, 1975
3. Marx GF, Cabe CM, Kim YI, et al: Neonatal blood pressures. *Anaesthesist* 25:318-322, 1976

(Accepted for publication May 15, 1979.)

Anesthesiology
51:475-476, 1979

In reply:—Drs. Diaz and Marx appropriately emphasize the importance of considering the effects on the fetus of drugs given to the mother. In addition, they correctly state that nitroglycerin may cross the placenta more readily than trimethaphan. Their recommendation to decrease the dosage of succinyl-

choline, however, is not an ideal solution to the problem. Our patient experienced prolonged apnea after a single dose of succinylcholine. The use of less succinylcholine might have resulted in inadequate paralysis, difficulty with intubation, and increased risk of vomiting and aspiration.