

nism. Straughan⁶ rightly points out a high safety factor for neuromuscular transmission by acetylcholine. Larger doses of procaine, which reduce acetylcholine release by more than half, indeed do produce neuromuscular blockade. Straughan also raises the possibility that procaine may inhibit acetylcholine release by acting on the motor nerve terminal. The action of procaine on the motor nerve terminal has been demonstrated by Dr. Usubiaga (Fed. Proc. 26: 512, 1967).

In summary, Dr. Usubiaga has emphasized the lack of knowledge concerning the neuromuscular mechanisms of action of quinidine. This in no way negates the interaction we noted between quinidine and the neuromuscular blocking drugs, nor does it negate the two hypotheses concerning mechanism of action.

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Surgery

ETHYLENE OXIDE Sterilization with ethylene oxide results in penetration of the sterilized material by the gas. If such material is used without adequate elimination of the gas, hemolysis and tissue irritation may result. Plastic and rubber were analyzed for ethylene oxide content using a gas chromatograph. For both, there were sharp drops in gas content during 48 hours of aeration. Plastic started at 1.3 mg. of gas per gm. of material; it declined to 0.46 mg. in 48 hours and to 0.38 mg. in seven days. Rubber started at 2.9 mg. per gm., still had 2.4 mg. in 24 hours, then fell sharply to 0.18 mg. in 48 hours, and to 0.1 mg. in seven days. It is recommended that plastic be aerated at least 48 hours, and rubber at least 72 hours, before they come in contact with the body. (Matsunoto, T., and others: *Safe Standard of Aeration for Ethylene Oxide Sterilized Supplies*, Arch. Surg. 96: 464 (March) 1968.)