

More about Masseter Spasm and Malignant Hyperthermia

To the Editor:—The recent letter by Badgwell and Heavner, entitled Masseter Spasm Heralds Malignant Hyperthermia—Current Dilemma or Merely Academia Gone Mad,¹ bears comment. Masseter rigidity with the use of succinylcholine truly does pose a dilemma for the practicing anesthesiologist. Rather than an infrequent event, masseter rigidity is relatively common, at least in children. One of 125 children anesthetized with halothane and given succinylcholine displayed masseter rigidity in the study of Schwartz *et al.*²

Clinical malignant hyperthermia (MH) certainly has been noted subsequent to masseter rigidity, often following an hour or more of uneventful anesthesia.³ In some instances clinicians proceed for brief surgical procedures, often after switching to nontriggering anesthetics, and patients do not experience clinical episodes of MH. However, the relative infrequency of MH, or the relative infrequency of MH after masseter rigidity, does not justify (as the authors state) ignoring the warning sign of masseter rigidity.

The coincidence of MH with masseter rigidity based on *in vitro* tests ranges from about 50% to 100%.^{2,4-6} In a recent unpublished review of 63 patients referred to our center for MH evaluation because of masseter rigidity, 36 (57%) were diagnosed as MH positive by the halothane contracture test. The age range was 1.5–41 yr. This is in accord with our previously reported incidence of 52%.³ In all but one, masseter rigidity was induced by succinylcholine (unpublished).

However, a positive response to halothane does not guarantee that the patient will trigger with every exposure to triggering agents. Some have as many as 13 anesthetics before manifesting their MH susceptibility.

Far from “academia gone mad,” this problem is a clinical dilemma brought to light by serious investigators. The implications, although not yet fully understood,

serve to increase awareness of a relatively unusual problem. Patient care thereby is improved.

The studies we have referred to indicate that succinylcholine is a drug associated with significant problems, even in healthy children. The problems, although not frequent, are certainly not rare! With the introduction of intermediate duration nondepolarizing relaxants, perhaps it's time to think of succinylcholine as a drug to be used on indication only.

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