

Correspondence

Muscle Relaxants

To the Editor:—Having been a party to the introduction of curare into anesthetic practice, and having been a participant in the establishment of the fact that neither curare nor any other commonly used muscle relaxants possess anesthetic properties, I am repeatedly provoked by inferences, if not direct statements, that there are such things as “relaxant techniques.” An example of this usage occurs in the editorial written by Cascorbi and Gravenstein in the April 1974 issue (ANESTHESIOLOGY 40:319–320, 1974). Throughout the editorial there is repeated use of the term “relaxant technique.” I have no quarrel with the main thrusts of the editorial, that is, (1) that anesthetists should not be intimidated by legal influence on scientifically sound practice, and 2) that they should not be shunted into use of other anesthetic techniques which may be no safer simply because of legal or local political pressure.

What does upset me is the implication inherent in the phrase “relaxant technique” that relaxants contribute something to the anesthetic state other than relaxation of striated muscle. I know of no evidence to support this belief. My concern is not with the inappropriate use of words but with the fact that relaxants used as a substitute for anesthetic drugs result in a condition which may be satisfactory to surgeons and some anesthetists but is very unsatisfactory for those patients who are so lightly anesthetized that they are aware of various stages of the anesthesia and surgical procedure. There is also reasonable evidence that patients so lightly anesthetized incur stresses on the circulatory system, such as increased workload on the heart. Evident also are significant autonomic responses. Thus, the “relaxant technique” can cause not only discomfort but additional and unnecessary stresses of an organic nature.

I know that patients who are moving in response to a stimulus during light (or insufficient) anesthesia can be made with application of relaxants to lie still without increase in anesthetic concentration or dose of adjuvant drugs such as narcotics and/or barbiturates. Many anesthetists interpret this return to quietude to mean that the relaxant contributed

to pain relief or some other aspect of the “anesthetic” process. I prefer to interpret this cessation of movement with addition of relaxant not only to the production of paralysis but also to the possibility that reduction of muscle tension results in less input of stimuli. The level of anesthesia extant then matches the input of stimuli and no increase in anesthetic drug is needed.

All inhalation anesthetic techniques may or may not include use of relaxants (depending upon the need for improved muscle relaxation). I assume, therefore, that a “relaxant technique” is one in which relaxants are used either 1) in some misguided attempt to substitute relaxants for anesthetics, or 2) deliberately in excess of that amount needed for muscle relaxation. The former use is bereft of any scientific basis and the latter application leads to overdose, probably the most significant hazard in the use of relaxants.

Use of relaxants in anesthesia for operations not requiring muscle relaxation, such as mastectomy, superficial plastic procedures, etc., is inappropriate. Use of relaxants to keep moribund patients from moving during operation is also inappropriate. It is quite possible to keep such patients alive and suitable for surgery with meticulous care in management of anesthesia. Liberal and unqualified use of relaxants to cover ineptness in management of inhalation anesthesia has been decried from the time of introduction of relaxants into anesthetic practice.

The professional anesthetist always attempts to use drugs efficiently and appropriately. I am concerned that many who profess to be practicing anesthesia on a professional level are failing even to maintain (let alone to develop) their professional capacities by resorting to the “easy way out” provided by relaxants. This is a convenient “cop-out” used regularly by the technician in anesthesia. The “easy way out” is often not the “best way out” for the patient.

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