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Route of Nondepolarizing Pretreatment Important

To the Editor:—I read with interest the article by Meyers *et al.*¹ Their findings are contrary to those of Miller *et al.*² The methodology and conclusions of the Meyers study perplex me. In the methodology they state clearly the routes of administration of all drugs except the pretreatment drugs. The legend for table 1 states that *d*-tubocurarine was given intramuscularly. The legend for table 2 does not specify the routes of administration of the pretreatment drugs. I am not sure whether the pretreatment drugs were given intramuscularly or intravenously. If it was intramuscularly, then these findings cannot be compared with those of Miller and others who gave their pretreatment drugs intravenously. By saying that in only 5 per cent of the 40 patients they observed fasciculations, do they want us to assume that *d*-tubocurarine, 0.09 mg/kg, intramuscularly, 3 min before administration of succinylcholine is effective in preventing fasciculations?

It must be pointed out that the study by Miller and

others included four patients with glaucoma who had increased intraocular pressure that did not increase further following intravenous pretreatment and succinylcholine administration.

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In reply:—All drugs, including pretreatment drugs, were given intravenously. The legend for table 1 contains a typographical error and should read "iv" instead of "im" as stated.

Glaucomatous patients were not included in our study.

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d-Tubocurarine Pretreatment Time Limited

To the Editor:—Dr. Meyers reported a failure of nondepolarizing neuromuscular blocking drugs to inhibit succinylcholine-induced increases in intraocular pressure.¹ Our studies (unpublished) and those of Miller *et al.*² and Wylie and Churchill-Davidson³ indicate that the effectiveness of *d*-tubocurarine is time-limited. Succinylcholine must be administered 2½ to 3 min after giving *d*-tubocurarine. Outside of this narrow time limit, the protection against increasing intraocular pressure, potassium liberation and muscle fasciculation is incomplete or nonexistent. We assume then that *d*-tubocurarine failed to prevent these effects in Dr. Meyers' experiments because succinylcholine was injected as late as 4 to 5 min after pretreatment.

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