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Veratrin Response of Functionally Isolated Muscle Fibers.

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Superficial fibers of the frog's sartorius, stimulated with the pore electrode and having their contraction recorded by the mercury droplet method,¹ exhibit a typical veratrin curve when the drug is applied locally in very dilute solutions (1:100,000 or weaker). The quick stroke initiating the response conforms to the all-or-none law governing twitches which prevail in the absence of the veratrin modification. The slow remainder of the curve does not rise above the twitch. It occurs in the same fiber which performs the twitch. Concurrent veratrin and non-veratrin responses may be observed in the same field in different fibers, and may be recorded, on periodic stimulation, as simple twitches superimposed upon a slowly subsiding base-line. Under such conditions of excitation a summation of veratrin responses may occur, resembling the measured, step-like tetanus levels which are brought out by the same method with more frequent stimuli in normal muscle.

¹ Pratt, F. H., and Eisenberger, J. P., *Am. J. Physiol.*, 1918, xlix, 1.