

藜芦碱引起神经元放电峰峰间期慢波振荡

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为了研究Na通道失活门与受损背根节神经元放电型式的关系,在大鼠背根节慢性压迫模型上记录单纤维自发放电,观察与分析了Na通道失活门抑制剂藜芦碱(veratridine)引起峰峰间期慢波振荡的型式和特征。结果表明:在阻断Na通道失活门之后,受损背根节神经元产生的慢波振荡具有变化幅度大和振荡时程长的特征,可分成V,倒 Π ,整数倍,弥散和复合等5种基本型式。

SLOW WAVE OSCILLATION INDUCED BY VERATRIDINE IN INJURED DORSAL ROOT GANGLION NEURONS

In order to study relationship between inactive gate of sodium channel and patterns of discharges from injured dorsal root ganglion, spontaneous activities from single fibers of chronically compressed dorsal root ganglion neurons were recorded. We observed and analyzed patterns and characters of slow wave oscillation of interspike interval (ISI) recorded from injured dorsal root ganglion neuron fibers induced by veratridine, a blocker of inactive gate of sodium channel. It is suggested that the basic characters of slow wave oscillation in injured dorsal root ganglion have large varied amplitude and long cyclic duration, and that it can be divided into five basic patterns i.e. V type, reversal Π type, integer multiple type, diffusive type and compound type.

关键词

背根节(Dorsal root ganglion); 自发放电(Spontaneous activity); 藜芦碱(Veratridine); 慢波振荡(Slow wave oscillation); 钠通道失活门(Inactive gate of sodium channel)