Suxamethonium chloride



Prolonged neuromuscular block: case report

A 62-year-old man experienced prolonged neuromuscular block while receiving suxamethonium chloride.

The man was scheduled to undergo pre-operative staging of a non-small-cell lung carcinoma. Anaesthesia was initiated and he received an injection of suxamethonium chloride 35mg (0.5 mg/kg) as a muscle relaxant. One minute later, he reached 0% single twitch (T1); the examination was completed without difficulty. Upon completion of the examination, the nerve stimulatory was reading 0% for single twitch stimulation and visual and tactile tests indicated an absence of muscular activity. Atypical serum cholinesterase was suspected.

The man was intubated and sedated, and mechanical ventilation was maintained until he recovered his neuromuscular function. He was extubated after 3 hours, having made a complete neuromuscular recovery. Subsequent laboratory investigations revealed a distinct pseudocholinesterase deficiency.

Author comment: We report the case of a prolonged neuromuscular block following ultrashort anaesthesia with suxamethonium chloride caused by a previously undiagnosed pseudocholinesterase deficiency.

Mangen J, et al. Prolonged neuromuscular block with succinylcholine after ultrashort anaesthesia - Do we need alternatives?. Anasthesiologie and Intensivmedizin 54: 254-257, No. 5, May 2013 [German; summarised from a translation] - Germany