

Anesthesia Protocol

All subjects were premedicated with midazolam, after which a peripheral intravenous catheter was placed. Standard anesthesia monitoring included electrocardiography, pulse oximetry, and both cuff and arterial blood pressure measurement. Pre-oxygenation was performed before anesthesia was induced with propofol (200 mg) and either a short-acting non-depolarizing (rocuronium) or depolarizing (succinylcholine) neuromuscular relaxant. Before determination of baseline tceMEPs, the level of neuromuscular blockade was assessed after the initial intubating dose by recording an evoked muscle potential from the left or right abductor hallucis muscle after stimulation of the posterior tibial nerve. Four 50-mA electric stimuli were delivered to the nerve at a rate of two per second over two seconds according to conventional anesthesia practice. The ratio of the amplitude of the fourth (T_4) to the first (T_1) muscle contraction represented an index of the degree of neuromuscular blockade. Post-intubation tceMEPs were recorded once the amplitude ratio indicated that at least 75% of the receptors were unblocked. At this point, no more paralytic agent was administered in an effort to maximize the tceMEP amplitude^{27,33}.