Effect of antagonism of mivacurium on recovery of extraocular muscle function

Mellor, DJ; Moss, E; McAteer, EM; Shah, MV

Date: 1996

Abstract

We have measured extraocular muscle function in 41 patients who received neuromuscular block with mivacurium 0.2 mg kg-1 during anaesthesia with propofol, ketorolac, fentanyl and isoflurane in nitrous oxide and oxygen, which was antagonized at the end of surgery with neostigmine 0.05 mg kg-1 and glycopyrronium 0.01 mg kg-1 in 21 of these patients. Extraocular muscle function was measured before and after surgery in each group with the Maddox Wing apparatus and compared with a control group (n = 20) who breathed spontaneously the same gaseous anaesthetic mixture via a reinforced laryngeal mask airway. In patients where the action of mivacurium was antagonized, extraocular muscle function was improved significantly 20 min after antagonism ($P < 0.001$) compared with those who received no antagonism. At 60 min after antagonism, there were no differences between the groups. There were no differences between patients who received no neuromuscular blockers and those who received blocker and antagonist.