Remifentanil attenuated the increase in intraocular pressure after suxamethonium chloride [succinylcholine] and tracheal intubation during rapid sequence induction in a study conducted by researchers from Singapore. In the study, 45 patients scheduled for elective surgery received a bolus dose of remifentanil, fentanyl 2 µg/kg or placebo 1 minute before anaesthesia was induced with IV thiopental sodium; remifentanil was given over 30 seconds. Suxamethonium chloride 2 mg/kg was then given followed by intubation. The intraocular pressure was lower in remifentanil-treated patients than in placebo recipients. However, fentanyl did not attenuate the increase in intraocular pressure associated with suxamethonium chloride. No haemodynamic adverse effects of remifentanil were seen in the study.

Ng H-P, et al. Effect of remifentanil compared with fentanyl on intraocular pressure after succinylcholine and tracheal intubation. British Journal of Anaesthesia 85: 785-787, Nov 2000 800853399