

Anesthetic management of a patient with Huntington's chorea

Sir,

We would like to report the anesthetic management of a patient with Huntington's chorea, for which experience is limited.^[1-5] A 45-year-old male, weighing 45 kg, presented for intraocular lens implant surgery for bilateral immature senile cataract. He was a known case of Huntington's chorea for the last 25 years. He had gross choreiform movements, ataxia with progressive

mental deterioration and received haloperidol 1.5 mg bid and lorazepam 1 mg hs orally. Family history of chorea was present in two siblings. There was no history of any previous surgical procedure or prior exposure to anesthetic agents. Since the patient had gross abnormal choreiform movements, general anesthesia was chosen for the procedure in order to ensure a tranquil surgical field.

Tab. haloperidol and lorazepam were continued on the day of surgery. The patient was premedicated with ranitidine 150 mg orally. Anesthesia was induced with glycopyrrolate 0.2 mg, propofol 100 mg and rocuronium 40 mg intravenously. Tracheal intubation was performed with 8.0 mm ID cuffed endotracheal tube. Morphine 4.5 mg and ondansetron 4 mg were supplemented. Anesthesia was maintained with O₂ and N₂O (33: 67) and sevoflurane 1%. At the end of surgery, which lasted 45 min, patient was extubated uneventfully with reversal using neostigmine 2.5 mg and glycopyrrolate 0.4 mg intravenously. Recovery and immediate postoperative period was uneventful.

Huntington's chorea is a rare hereditary disorder of the nervous system. It is inherited as an autosomal dominant disorder and is characterized by progressive chorea, dementia and psychiatric disturbances. Experience with the management of anesthesia in Huntington's chorea is too limited to propose specific drugs and techniques.^[1-5] Factors of concern to the anesthesiologist include how to manage these frail elderly malnourished people incapable of cooperation, with increased risk of aspiration due to involvement of pharyngeal muscles and exaggerated response to sodium thiopental and succinylcholine. The primary goal in general anesthesia for these patients is to provide airway protection and a rapid and safe recovery. The unpredictability of thiopentone can be circumvented by using induction agents like midazolam and propofol.^[1,2] These patients may be sensitive to effects of non-depolarizing muscle relaxants. Use of sevoflurane and mivacurium in these patients seems to be effective and safe.^[3] Decreased plasma cholinesterase activity and prolonged response to succinylcholine has been reported.^[4] This can be averted by using rocuronium when rapid sequence induction becomes necessary.^[5] Further, the incidence of postoperative shivering can be minimized by use of isoflurane and sevoflurane in place of halothane. The low solubility coefficients of these agents allow early recovery without postoperative confusion and early return of protective airway reflexes, thus reducing the risk of pulmonary aspiration. Other concerns regarding the anesthetic management are determined by the level of physiologic debilitation in the individual patient.

Kad Nandita, Lal Jatin, Hooda Sarla

Department of Anaesthesiology and Critical Care, Pt. B.D. Sharma

*Post Graduate Institute of Medical Sciences, Rohtak-124 001,
Haryana, India. E-mail: dr.jatinlal@gmail.com*

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