for management of a difficult airway, but the lack of different-sized INTLOCKs may limit its clinical application. Nasotracheal intubation may be an alternative choice in such a situation and help to resolve this problem at the present time.

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doi:10.1093/bja/aen045

Emergency anaesthesia in central core disease

Central core disease (CCD) is an autosomal dominant neuromuscular disorder, the prevalence of which is greater than that of other congenital myopathies, being as high as 5.0/100 000.

1 It is caused by mutation of the skeletal muscle ryanodine receptor and is characterized by central cores on muscle biopsy. Clinical features are of a congenital myopathy. Patients are particularly predisposed to malignant hyperthermia (MH) in response to standard triggering agents
2 and prolonged neuromuscular block in response to non-depolarizing neuromuscular blockers.

3 Despite its prevalence, little information is available in the literature and none on the emergency anaesthetic management of patients with this disease.

We report the case of a 31-yr-old male known to have CCD who required general anaesthesia for investigation and repair of facial injuries after a fall. An open fracture of the nasal bones was suspected and there was significant facial soft tissue trauma. On examination 12 h after the injury, there was still evidence of bleeding, with blood passing through the posterior choanae and being swallowed continuously. The patient had also consumed 12 units of alcohol before the injury, so was judged to be inadequately starved for routine induction of anaesthesia.

Airway assessment revealed a Mallampati score of 1, three finger mouth opening, full jaw protrusion, and neck extension. The patient had never undergone general anaesthesia and there was no family history of problems.

Awake fibreoptic intubation would have required anaesthetizing an airway onto which there was active bleeding, with the inherent risks of aspiration of blood and airway obstruction. Rapid sequence induction with suxamethonium would have risked precipitating MH and with rocuronium would have resulted in prolonged neuromuscular block in a hospital without intensive care facilities.

The vaporizers were removed from the anaesthetic machine which was flushed with oxygen for 2 h. Dantrolene was immediately available. After pre-oxygenation, a remifentanil infusion was commenced at 0.3 \text{ \mu g kg}^{-1} \text{ min}^{-1} and continued until the patient acknowledged its effect. A modified rapid sequence induction of anaesthesia was then performed using high-dose alfentanil (30 \text{ \mu g kg}^{-1}) and propofol (3.75 \text{ mg kg}^{-1}).

Direct laryngoscopy revealed a Cormack and Lehane Grade I view of the larynx and the trachea was intubated easily with a size 8 south facing RAE tube. The vocal cords were open and there was no coughing. Anaesthesia was maintained with a target-controlled infusion of propofol (6–8 \text{ \mu g ml}^{-1}) and remifentanil at 0.3–0.5 \text{ \mu g kg}^{-1} \text{ min}^{-1}. At the end of surgery, these infusions were discontinued, spontaneous ventilation resumed, and emergence occurred without complication. The trachea was extubated with the patient fully awake in the left lateral position. The postoperative course was uneventful and the patient was discharged the following day.

We propose that this anaesthetic technique may provide a safe, stable, modified rapid sequence induction technique which avoids the use of neuromuscular block and MH precipitants in patients with CCD. It provided good intubating conditions and allowed tolerance of the tracheal tube.

The technique may have more widespread use in other muscular dystrophies and conditions that predispose to MH.

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doi:10.1093/bja/aen046