

Sevoflurane induction of anesthesia for a large epiglottic cyst removal when awake intubation is not an option

Dear Editor,

Epiglottic cysts, although rare, may hinder tracheal intubation while the anesthetist may encounter difficulty in airway management¹. We report the case of a 46-year-old male who underwent excision of a sizeable epiglottic cyst. His medical history included major depression combined with anxiety disorder, for which he was treated with a combination of sertraline with lorazepam. The patient refused to cooperate or consent to awake intubation under local anesthesia of the upper airway, so it was decided to proceed with induction to anesthesia with sevoflurane, using the technique of vital capacity breaths. When loss of consciousness was achieved, the sevoflurane concentration was reduced to 4% and its administration was continued for a total duration of eight minutes. After an extremely cautious direct laryngoscopy, Cormack and Lehane laryngoscopic view was graded as two. Due to the cyst's size, direct vision of the laryngeal entrance was not possible, so an elastic gum was inserted, in order to advance the cuffed sized 6.5 endotracheal tube (ETT) into the trachea. Following excision of the cyst, extubation was performed under deep sedation in the operating room 15 minutes later, while no adverse events were encountered intraoperatively. Following a two-day uneventful postoperative period, he underwent indirect laryngoscopy, which revealed an edema-free epiglottis, so he was discharged from the hospital.

The preferable approach to secure the difficult airway is with the patient still awake, however in the reported case an alternative approach should be considered².

The quality of induction with sevoflurane, along with its ability to generate optimal conditions for endotracheal tube insertion, without use of supplemental opioids or muscle relaxants, has been well documented³. Vital capacity breathing at 8% sevoflurane accelerates the induction to anesthesia and is associated with a lower incidence of involuntary movements and coughing.

The case reported herein further supports the fact that administration of neuromuscular blocking agents in a difficult airway scenario should be held back until proper position of endotracheal tube is verified³. Induction of anesthesia with high-concentrations of sevoflurane could be an attractive and safe alternative to standard general anesthesia approach for endotracheal intubation of patients with large epiglottic cysts, who refuse an awake intubation technique.

References

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Conflict of interest

None.

Tsaousi G, Pourzitaki Ch, Amaniti E

Department of Anesthesiology and Intensive Care, AHEPA University Hospital, Aristotle University of Thessaloniki, Greece

Corresponding author: Pourzitaki Chryssa, Department of Anesthesiology and Intensive Care, AHEPA University Hospital, Aristotle University of Thessaloniki, Thessaloniki 54636, Greece, e-mail: chpour@gmail.com