

ANESTHETIC MANAGEMENT OF A CHILD FOR ESOPHAGECTOMY

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Introduction: Esophagectomy for excision of an esophageal mass is uncommon in the pediatric population. There are few cases described in the literature of the management of one-lung ventilation and post-operative pain control for pediatric patients. We describe the anesthetic management of a child presenting for esophagectomy.

Clinical features: A 9 year-old, 16 kg child with a two-month history of dysphagia and a known obstructive distal esophageal mass presented to the operating room for a three-stage esophagectomy : laparotomy, thoracotomy and cervical anastomosis. After induction of general anesthesia, the airway was secured with a single-lumen 5.5 endotracheal tube. With the patient anesthetized, a thoracic epidural was placed at T9-T10. Anesthesia was maintained with sevoflurane and boluses of local anesthetic and opioid via the thoracic epidural. Isolation of the right lung for thoracotomy was achieved with a 5 Fr Arndt blocker in the right mainstem bronchus. On completion of the surgery an epidural infusion of a bupivacaine/fentanyl solution was initiated and the child was successfully awakened and extubated. She was transported to the post-anesthetic care unit comfortable and stable.

Discussion: Esophagectomy in a pediatric patient presents some unique anesthetic challenges. Achieving one-lung ventilation via a double-lumen tube may be challenging with a child's smaller airway. This case illustrates the successful use of the Arndt blocker for this purpose. Adequate postoperative pain relief may be challenging. Thoracic epidurals are not often used in young pediatric patients. We illustrate the successful use of a thoracic epidural for post-thoracotomy pain in a 9 yr-old patient.

References:

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