

Correspondence

Anesthesia for a child with a congenital antithrombin deficiency

To the Editor:

Congenital antithrombin (AT) deficiency is a rare syndrome in which thrombosis occurs readily during childhood as a result of a genetic defect in or the inactivation of AT. Although the occurrence of thrombosis and embolism in the operative and postoperative periods are listed as problems with AT deficiency in adults,^{1,2} the situation in children with this disease remains unclear. We report on a 12-yr-old boy with AT deficiency who was scheduled for surgery for an undescended testicle. Preoperatively, AT activity was 41% and 1500 U·day⁻¹ of AT were administered. No deep vein thrombosis was detected in the lower extremities prior to surgery. On the day of surgery, the child's extremities were wrapped with elastic bandages. Anesthesia was induced with propofol and vecuronium and maintained with O₂-N₂O-sevoflurane (2–3%). Surgery proceeded uneventfully. We continued to administer 1500 U·day⁻¹ AT until two days after the operation and the AT activity was 84%. No postoperative lung infarction secondary to thrombosis occurred.

In this case, we administered 1500 U·day⁻¹ AT and used elastic bandages perioperatively. Moreover, we encouraged mobilization the day after surgery. In adults, a filter has been placed in the inferior vena cava to prevent pulmonary embolism,² but this procedure would be difficult in children.

Anesthesiologists should be aware of the risk of thrombosis during and after anesthesia in patients with AT deficiency. In this patient, in addition to administering AT supplementation, the use of elastic bandages and active mobilization of the lower extremities appeared to be useful for the prevention of thrombosis and embolism.

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References

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Intratracheal kinking of endotracheal tube

To the Editor:

Obstruction of the endotracheal tube (ETT) can occur in various forms while the patient is intubated.^{1–3} We would like to report a rare case of intratracheal kinking of the ETT during nasotracheal intubation.

A 20-yr-old man with right mandibular fracture was scheduled for internal fixation of the fracture. He was healthy without any systemic disease. Anesthesia was induced with fentanyl, thiopental, and succinylcholine. Nasotracheal intubation was attempted with an internal diameter (ID) of 7.0 mm ETT. The tube could not pass through the patient's nasal cavity even with force and was changed for an ID 6.5 mm ETT. After soaking the tube in warm water, it could barely pass through the nasal cavity. At laryngoscopy, the tube was inserted past the vocal cords. Manual ventilation showed a peak airway pressure

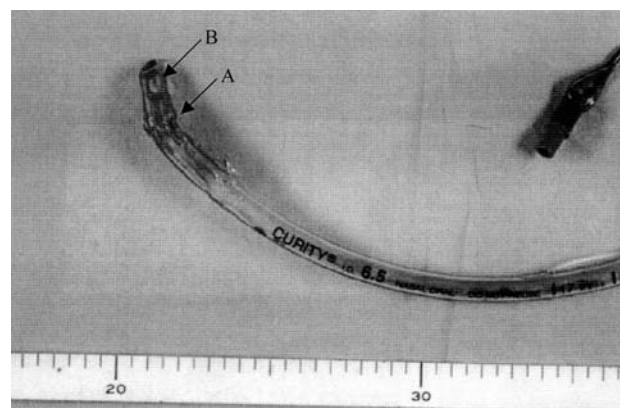


FIGURE The endotracheal tube removed from the patient. Arrow A indicates that kinking occurred at the site where the inflating lumen opens into the cuff. Arrow B points to the Murphy eye.