An Endoluminal Orotracheal Tube Obstruction in Paediatrics: A Case Report

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Our goal is to report a case of clinically significant mechanical ventilation obstruction caused by a blood clot in the lumen of the endotracheal tube during general anesthesia in a pediatric patient.

Clinical case: A 4-year-old patient underwent general anesthesia for osteochondroma excision at the 4th rib. Intubation with TOT nº5 proceeded without intercurrences. The whole surgical procedure was performed in right lateral decubitus. Three and half hours after beginning the surgery, the patient presented severe ventilatory difficulty, manifested by increased peak pressure, low tidal volumes, pulmonary auscultation with decreased vesicular murmur, and desaturation despite FiO2 increasing to 100%. Manual ventilation was initiated and the orotracheal tube was aspirated, with no outlet of any contents. Intraoperative chest X-ray showed no pneumothorax. The patient was placed in the supine position and re-intubated. The TOT displayed a strongly adherent blood clot with an extension of approximately 1 cm, causing luminal obstruction. After insertion of another TOT, ventilation was normally restored, without any sequelae for the patient.

Conclusion: The anesthetic act involves numerous possible complications. Suspicion and vigilance are essential to diagnose and treat any complications early.

The complications related to the airway are capable of causing hypoxia and irreversible damages in a short period of time, triggering the need to act and quickly recover the patency of the airway. In this case, the failed attempts of resolution of the endoluminal obstruction masked this diagnosis and high lined the possibility of a complication such as pneumothorax, which, by the type of surgery, emerged as the first problem hypothesis. The present case is relevant because it demonstrates a simple but possible cause of diagnosis delay of a common complication related to airway management.