

PAEDIATRIC ANAESTHESIA

COMMON CRISES

IN PAEDIATRIC ANAESTHESIA

LARYNGOSPASM

Laryngospasm is the sustained closure of the vocal cords resulting in the partial or complete loss of the patient's airway. Laryngospasm is a common complication during anaesthesia. It occurs mainly at induction and reversal of anaesthesia. It is also more common in infants than in the older child. Patients with URTI are more prone to laryngospasm.

Factors predisposing to laryngospasm include: insufficient depth of anaesthesia, airway hyperreactivity, airway irritation from secretions, blood, or malpositioned airway devices.

Management:

Prevention

Maintain adequate depth of anaesthesia, avoid premature stimulation of the patient and/or airway. During emergence, patients should be extubated either in a deep plane of anaesthesia or fully awake but not in-between.

Treatment:

Prompt recognition and early correction is essential to re-establish ventilation and oxygenation as soon as possible

1. **100% O₂, apply CPAP** via mask and increase the depth of anaesthesia with an intravenous agent (e.g. propofol). Suction secretions if required.
2. If laryngospasm cannot be aborted by mask CPAP:
Suxamethonium 0.5mg/kg IV or 4mg/kg IM, in conjunction with atropine 0.02mg/kg IV or IM if bradycardic.

Always suspect aspiration pneumonitis if oxygen saturations remain poor after reversal of laryngospasm.

Reference:

1. Gavel G and Walker RWM. Laryngospasm in anaesthesia Contin Educ Anaesth Crit Care Pain first published online August 26, 2013 doi:10.1093/bjaceaccp/mkt031