DIFFICULT INTUBATION IN A PATIENT WITH UNKNOWN SUBGLOTTIC STENOSIS

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BACKGROUND

A **difficult airway** may be defined as the clinical situation in which a trained anesthesiologist experiences **difficulties** with facemask ventilation, **tracheal intubation** or both.

Subglottic stenosis is a rare cause for difficult intubation.

- **Congenital** subglottic stenosis usually presents with varying degrees of dyspnea and stridor.
- **Acquired** causes include prolonged endotracheal intubation or tracheostomy (90%), penetrating or blunt neck trauma, chronic inflammatory diseases, gastroesophageal reflux and neoplasm.
- **Diagnosis** can be confirmed by conventional radiography or CT-scan of the neck.
- **Asymptomatic** patients are rare and pose a challenge to the anesthesiologist. Stenosis may be **suspected** during intubation when the tube passes between the vocal cords but resistance is encountered in the stenotic area.

CASE REPORT

- 46 year old female; admitted for elective vaginal hysterectomy (correction of a complete uterovaginal prolapse).
- ASA II (Obesity [BMI 33,3 kg/m²]). No predictive signs for difficult ventilation or intubation. No previous surgeries.
- Monitoring: ASA standard.
- EV induction with fentanyl and propofol. Easy manual ventilation. **Grade I laryngoscopy** after administration of rocuronium.
- **Resistance to progression** of the OT tube **after the vocal cords** – Intubation only possible with a no.4 microlaryngeal tube (4th attempt).
- **Surgery postponed**, extubation without incidents.
- The patient referred previous **occasional dysphonia** (no dyspnea or dysphagia).
- Otolaryngologic evaluation, fibroscopy and CT-scan: **narrowing** in an **immediately sub-glottic** level with an **extension of 13mm** with **airway permeability preserved**.
- Assumption of a **congenital subglottic stenosis**.
- The surgery was rescheduled and a sequential anesthesia performed without incidents.

DISCUSSION

Asymptomatic subglottic stenosis is a rare condition that may present as an **unexpected difficult intubation** and has **high anesthetic risk**.

The **ability to approach the airway** and the **type of surgery** help the **decision on how to proceed** – awake the patient and confirm the diagnosis, or approach the airway differently (supraglottic device or invasive surgical airway).

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