



Awake Fiberoptic Intubation Without Lidocaine: Managing a Complex Airway in a Patient with Severe Amide Allergy and Tracheal Compression

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Background:

Awake fiberoptic intubation (AFOI) is the gold standard for anticipated difficult airways, particularly when induction may lead to airway collapse. Standard AFOI relies heavily on topical anesthesia (usually lidocaine) to minimize airway reflexes and patient discomfort.

This case presents a rare situation where AFOI was required but topical amide anesthetics were contraindicated due to anaphylaxis.

Case Description:

A 61-year-old male with a BMI of 47.6 and a history of hypertension, COPD, asthma, DVTs, and hyperthyroidism presented for total thyroidectomy and tracheostomy. He had a **significantly enlarged goiter causing tracheal compression, raising concern for airway collapse on induction**. Awake fiberoptic intubation was deemed necessary, however, the patient had a **rare anaphylactic allergy to lidocaine and articaine**, precluding the use of standard topical airway anesthesia.

Anesthetic Planning & Management

- Extensive pre-procedural coaching
- Explanation of sensations expected during fiberoptic passage
- Reinforcement of calm nasal breathing and cooperation

Glycopyrrolate administered to reduce secretions, essential for visualization. Sedation was given to minimize discomfort while preserving spontaneous ventilation as follows:

- Remifentanil infusion (0.04-0.2 mcg/kg/min)
- Dexmedetomidine 1 mcg/kg load followed by infusion
- Ketamine bolus of 0.2 mg/kg

AFOI initiated. Once vocal cords were visualized, propofol infusion was initiated and the endotracheal tube was advanced following a final bolus of propofol.

After confirming end-tidal CO₂, a neuromuscular blocker was administered and general anesthesia commenced.

Key Considerations:

Traditional AFOI relies heavily on local anesthetic; eliminating it increases airway sensitivity.

Major challenges include but are not limited to:

- Increased airway reactivity without topicalization
- High reliance on patient communication and coaching
- Potential for increased time required for delicate scope advancement

Sedation therefore must balance comfort with preservation of ventilation. Multimodal IV sedation allowed reasonable tolerance and effective conditions:

- **Dexmedetomidine:** cooperative sedation without respiratory depression
- **Remifentanil:** analgesia, blunted cough reflex, rapid titration
- **Ketamine:** analgesia and dissociation while maintaining airway tone and respiratory stability

Conclusion:

Awake fiberoptic intubation without lidocaine is unusual but can be achieved safely with careful planning, multimodal sedation, and meticulous patient coaching. This case emphasizes the need for anesthesiologists to adapt to rare but high-consequence situations and consider alternative strategies when amide anesthetics are contraindicated.