**Título:** FROM THE AMBULATORY TO THE ICU: POST-OPERATIVE COMPLICATIONS OF FUNCTIONAL ENDOSCOPIC SINUS SURGERY

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**Área Terapêutica/Tema:** Prática baseada na evidência e melhoria da qualidade (Evidence-based Practice and Quality Improvement)

**Resumo:**

NSAID-exacerbated respiratory disease (NERD) affects about 7% of the adult asthmatics. It refers to the combination of asthma, chronic rhinosinusitis with nasal polyposis and respiratory tract reactions to COX-1-inhibiting nonsteroidal anti-inflammatory drugs (NSAIDs). Functional endoscopic sinus surgery (FESS) is currently the primary approach for the surgical treatment of chronic sinusitis. (1) Revision FESS is considered to have an increased risk of complications. The authors present a case of a complicated postoperative period.

A 44-year-old man, ASA III, with severe NERD proposed to start biological therapy, was scheduled for bilateral FESS in an outpatient setting. This was his 6th intervention due to recurrent polyposis. General anesthesia was performed with a multimodal analgesia strategy, without NSAIDs. The anesthetic team was responsible for pharyngeal tamponade. Topic phenylephrine, controlled hypotension and reverse Trendelenburg were used in order to decrease blood loss. After 3 hours of surgery, awake extubation was successful. After bed transfer, there was an abrupt drop in SpO2 with respiratory impairment and reintubation was decided. On direct laryngoscopy, blood was observed in the nasopharynx, oropharynx and cavum. After reintubation, blood from the pharynx and trachea was aspirated and a nasogastric tube was introduced, also showing the presence of blood in the digestive tube. For suspected pulmonary aspiration, a fibrobronchoscopy was performed, which revealed the presence of severe bronchospasm, but no blood in the tracheobronchial tree. Bronchodilators were administered, considering the need for high FiO2 and increased airway pressure. To prevent further posterior epistaxis, nasal packing was revised by the ENT specialist. Extubation was postponed and the patient was transferred to the ICU for further management of severe asthma exacerbation. Successful extubation was performed after 3 days, once nasal packing was removed.

 FESS is a broadly accepted procedure but not risk-free. Hemorrhage in the recent postoperative period is one of the most frequent complications and patients with extensive polypoid disease may be at risk for substantial blood loss, considering the rich nasal mucosa vascular supply. (2) Occult post-operative bleeding may impose the risk of airway compromise and pulmonary aspiration. In the PACU, continued monitoring for possible delayed manifestation of complications is essential. Also, extubation is an elective process. The identification of high-risk patients for extubation allows the decision to postpone extubation until the risk of airway compromise decreases. (3) In this patient, considering the history of exuberant nasal polyposis, severe asthma and number of interventions, postponing extubation may be a viable option in future nasal surgeries.

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