Early Management in Upper Airway Obstruction

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Dear Editor,

Airway-obstructing lesions have several different aetiologies, and their subsequent management is pathology-dependent. The causes of airway obstruction can be divided into supraglottic, such as Ludwig's angina, tumours and foreign bodies; subglottic, such as tracheal stenosis and extra-laryngeal, such as goitre (1). Vascular malformations pose unique challenges to anaesthesiologists, as engorged vessels in the oropharynx can easily bleed during airway manipulation and are often not specifically located in one of the aforementioned compartments (2). A temporary tracheotomy is often necessary, and sclerotherapy and/or embolisation may be performed to shrink the anomaly. However, early management of patients with acute airway obstruction is vital to decrease overall morbidity and mortality.

We present the case of a patient with stridor caused by a longstanding vascular lesion located on the left side of his neck compressing the trachea and oropharynx. Over the course of 30 years, the patient had been receiving sclerotherapy and radiation treatments to shrink the lesion and had a remote history of respiratory collapse necessitating a tracheostomy. Approximately 10 days prior to his presentation, he had undergone a sclerotherapy session at another institution. Although initially stridorous in the Emergency Department, he was fully alert and oriented with stable vital signs. The anaesthesiology airway response team decided for an early awake intubation based on his extensive airway history and pathology.

The patient conferred with the physician who had performed the most recent sclerotherapy session and was convinced that intubation was not warranted. He refused to undergo early awake intubation even after extensive counselling by the anaesthesiology airway response team. Later that night, his respiratory status continued to decline, and ultimately, he was emergently taken to the operating room for a fiberoptic video laryngoscope-assisted intubation. The attempt to intubate and secure his airway was technically challenging as the patient did not tolerate spontaneous ventilation owing to further oxygen desaturation and anxiety. By initiating a hypnotic dose of propofol and rendering the patient apnoeic, there was a loss of upper airway tonicity and only a Grade III Cormack-Lehane view could be obtained. Fortunately, his airway could eventually be secured safely.

As anaesthesiologists, we are constantly presented with challenging situations that need timely decisions, particularly when it comes to respiratory compromise and difficult airways. In our patient, the timely and safer choice was early awake intubation in a controlled environment. We must be cognizant that even though we may know what the best outcome is for our patients, they may not always initially consent. Therefore, part of being a safe airway expert is to have a plan B and plan C. Our patient was initially hesitant to undergo another intubation and subsequently put himself at tremendous risk by delaying the procedure. The most important objective when dealing with an obstructed airway is determining the urgency of the situation. Early management of these lesions prevents exacerbating an urgent situation.

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