

Abdominal Myomectomy in a Patient with Tracheoesophageal Fistula Repair

Jasmine Tuteja, MD; Christopher Devlin, MD; Madina Gerasimov, MD
Department of Anesthesia, Zucker School of Medicine at Hofstra Northwell, New Hyde Park, NY

Introduction

A tracheoesophageal fistula (TEF) is a rare congenital anomaly that affects about 1 in every 3000 live births. It is an abnormal connection between the trachea and esophagus, which allows for swallowed foods and liquids to be aspirated into the lungs. TEFs typically occur with esophageal atresia, and usually alongside other congenital anomalies, as part of VACTERL association. A Type C TEF, which consists of a proximal esophageal pouch and a distal TEF accounts for about 84% of cases.

Infants usually present with drooling, choking, respiratory distress, and inability to feed. Treatment typically involves surgical correction. However, many patients who undergo TEF repair still have longstanding GERD and esophageal dysmotility into adulthood, which is an important consideration when providing anesthesia for such patients.

Case Report

A 39-year-old female presented for an abdominal myomectomy secondary to fibroids. Her medical history was significant for tracheoesophageal fistula repair at age 2, later complicated by graft infection and diverticulae formation. She also had left-sided vocal cord paralysis, a history of aspiration pneumonia, and chronic bronchitis. Due to concerns regarding the patient's airway and pulmonary status, neuraxial anesthesia with minimal sedation was originally planned for the procedure. However, due to numerous factors such as a planned subxiphoid incision, the patient's anxiety regarding only minimal sedation, and the possibility of needing to emergently intubate under suboptimal conditions, the patient ultimately chose to undergo general anesthesia from the beginning of the procedure. The case was successful, with the patient being safely intubated and extubated, and she was discharged home on post-op day 1.

Discussion

Even after repair of TEF in the neonate, patients can suffer from long-term respiratory and gastrointestinal complications that are important to be aware of when evaluating a patient with previous TEF repair. They can commonly have recurrent pulmonary infections, reactive airway disease, tracheomalacia, and bronchomalacia. Long-term esophageal dysmotility and gastroesophageal reflux can also lead to frequent aspiration and pneumonia, as seen with our patient. If a case can potentially be done under neuraxial or regional anesthesia, it can often be preferable to general anesthesia. However, due to the high risk of aspiration in these patients, they must be amenable to receiving minimal sedation. This can lead to many challenges in developing an anesthetic plan for these patients. Open communication with the surgical team and the patient is vital, so that the patient is able to make an informed decision on their anesthetic plan.

References

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