Colopericardial Fistula: A Late Complication of Esophageal Reconstruction

Georges Khalifeh*, Samer El Masri, Raja Wakim, Gilbert Helo

Department of General Surgery and Laparoscopic Bariatric surgery, Faculty of Medical Science, Al-Zahraa University Hospital, Lebanon

*Corresponding author: Georges Khalifeh, Department of General Surgery and Laparoscopic Bariatric Surgery Faculty of Medical Science, Al-Zahraa University Hospital, Lebanon. Tel: +96176471188; Email: Georgeskhalifehhh@hotmail.com


Received Date: 16 June, 2018; Accepted Date: 20 June, 2018; Published Date: 28 June, 2018

Background

Esophageal replacement for both benign and malignant diseases commonly uses gastric tube reconstruction or colonic interposition. A rare but potentially life threatening late complication is the formation of a colopericardial fistula.

We describe a case of colopericardial fistula occurring more than 20 years after esophageal reconstruction for congenital esophageal atresia. We report our surgical strategy and review the key concepts in the management of this complication.

Case Description

A 24-year-old man presented with a 10 days history of progressive productive cough, dyspnea and intermittent high-grade fever and chills. The patient medical history was significant for congenital esophageal atresia requiring a colonic tube reconstruction, at 1 year of age.

The patient was in good health with excellent function of his esophageal conduit for the ensuing 24 years until this most recent hospital admission. On admission, he had left pleural effusion and an enlarged cardiac silhouette. Initial laboratory studies demonstrated a leukocytosis of 28,000/mm³. He underwent a computed tomographic scan, which confirmed the presence of pyopneumopericardium with a communication between the colonic conduit and pericardium.

An upper endoscopy showed fistula at around 38 cm, 1 cm in diameter, through it the pericardium was seen. The patient NPO, TPN started, switched to broad spectrum antibiotics for 10 days, his condition gradually improved.

The patient was taken to the operating room for definitive repair where a midline laparotomy was performed. The gastric tube was completely mobilized and the fistula tract, which was adherent to the underlying myocardium, was excised. The gastric defect was primarily repaired, pericardial window was done with drainage tube inserted to the pericardium. Finally, a feeding jejunostomy was placed and the abdominal wall was closed.

Postoperatively, the patient recovered uneventfully and had an esophagram on postoperative day 7 that demonstrated no fistula or leak. The nasogastric tube was removed. He was transitioned from jejunostomy tube feeding to an oral diet and discharged home tolerating food by mouth on postoperative day 12, jejunostomy was removed 2 months after surgery.

Conclusion

In conclusion, we have described a case of colopericardial fistula occurring as a late complication of colonic interposition for esophageal atresia. Although rare, colopericardial fistula is a life-threatening condition with high associated mortality.