

Use of extracorporeal membrane oxygenation in thoracic or airway surgery: a single-center experience

YanZhang

West China School of Medicine in Sichuan University ,
Sichuan Province 610041, China.



Abstract

Background: Extracorporeal membrane oxygenation (ECMO) is increasingly used in patients undergoing thoracic and airway surgical procedures. However, studies reporting the clinical outcomes of these patients are scarce. This study was designed to evaluate the clinical outcomes of these patients and summarize the experience of ECMO in our hospital. Methods: Between May 2013 and December 2018, we reviewed the clinical data of 15 patients undergoing ECMO-assisted airway or thoracic surgery in our hospital. Results: Of the 15 patients, 10 cases received peripheral veno-arterial (VA) ECMO and 5 cases received veno-venous (VV) ECMO. Indications for ECMO were pulmonary transplantation (n = 5), traumatic main bronchial rupture (n = 2), traumatic lung injury (n=1), lung cancer affects the distal airway, carina and large blood vessels (n = 1), airway tumor leading to severe airway stenosis (n = 2), huge mediastinal mass infiltrated vena cava (n = 3) and right thigh synovial sarcoma with pulmonary metastasis (n=1). All patients were successfully extubated and weaned from ECMO postoperatively. The main complications were hemorrhage (26.7%), infection (53.3%), acute hepatic dysfunction (33.3%) and venous thrombosis (26.7%). There was only one hospital death and postoperative one-year survival rate was 86%.

Biography:

I have completed my undergraduate studies at the age of 22 years from China Medical University and I'm now in my second year of graduate school from Sichuan University of Anesthesiology. My major research direction is important organ protection and I have published 1 paper in 'Perfusion' journal in March of this year.

[13th World Congress on Anesthesiology and Critical Care:](#)
Tokyo, Japan- May 15-16, 2020.

Abstract Citation:

Yan Zhang, Use of extracorporeal membrane oxygenation in thoracic or airway surgery: a single-center experience, Anesthesia Congress 2020, 13th World Congress on Anesthesiology and Critical Care; Tokyo, Japan- May 15-16, 2020
(<https://anesthesiology.surgeryconferences.com/scientific-program>).

