

Postoperative complications of esophagoplasty in children

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Introduction

Esophageal replacement surgery (esophagoplasty) in children is a complex procedure often associated with significant postoperative complications.

- This study aims to highlight the immediate postoperative complications observed in a series of pediatric patients.

Methods

We reviewed immediate postoperative outcomes in a cohort of pediatric patients who underwent esophageal replacement. Complications were assessed clinically and radiologically, with appropriate interventions documented.

Results

- ✓ The most common postoperative complication was **pneumothorax**, observed in two patients due to pleural injury. Both patients developed expiratory dyspnea a few hours after surgery. Chest X-rays revealed a bilateral pneumothorax in one case and a right-sided pneumothorax in the other, necessitating pleural drainage for one week, with favorable outcomes.
- ✓ Another notable complication was **unilateral recurrent laryngeal nerve injury** in one patient, presenting with laryngeal dyspnea three hours post-surgery.

This required an emergency tracheotomy and temporary mechanical ventilation for five days; decannulation was successfully achieved after one month.

- ✓ A severe complication occurred in one infant with caustic esophageal stricture who underwent colonic interposition. The patient developed **mediastinitis** with septic shock on the first postoperative day, characterized by tachycardia, hypotension, leukocytosis (20,000/mm³), and elevated CRP (200 mg/L). Despite intensive antibiotic therapy and vasopressor support, the patient died after 10 days of intubation.

Conclusion

- Immediate postoperative complications following pediatric esophageal replacement can be severe, including pneumothorax, nerve injury, and life-threatening mediastinitis.
- Early recognition and prompt management are essential to improve outcomes.
- The mean postoperative hospital stay was 20 days.
- Mortality in this series was limited to one patient due to mediastinitis.