

CARINAL RECONSTRUCTION... MORE THAN A CHALLENGE

Diana Romero*, Miguel Perilla, Carlos Blanco, Camila Montero, Carolina Zuluaga, Ana Garcés
Clínica Shaio, HOMI pediatric hospital
Bogotá, Colombia

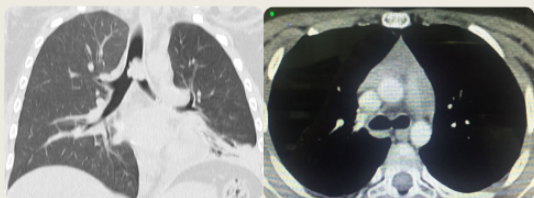
INTRODUCTION

A retrospective review of medical records and imaging was conducted for **three pediatric patients who underwent carinal reconstruction** between December 2016 and March 2025, outlining the underlying pathology, clinical presentation, surgical approach, and outcomes. Data collected included demographics, clinical presentation, type of airway pathology, surgical technique, and postoperative evolution. Carinal pathology in pediatric patients is rare and technically demanding. **Successful outcomes depend on individualized planning, advanced surgical techniques, and interdisciplinary management in specialized centers.**

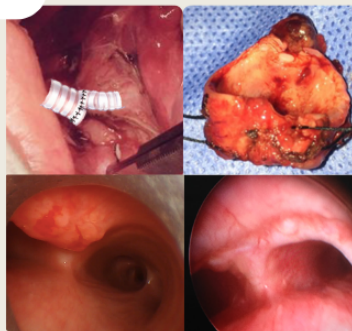
SERIAL CASES

PATIENT 1:

10-year-old male with a **mucoepidermoid tumor** compromising the anterior carinal wall.



Resection involved two distal tracheal rings and the first bronchial rings. Surgery was performed via right thoracotomy with veno-venous ECMO support.



The patient was extubated postoperatively and remains disease-free after nine years.

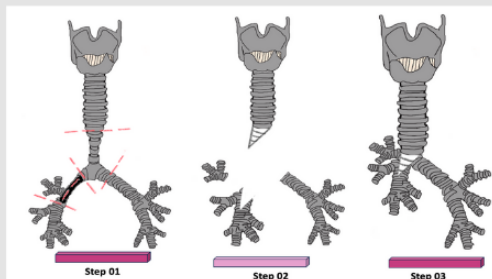
PATIENT 2:

2 mo. female with **distal tracheal stenosis, complete obstruction of the right main bronchus, and secondary lung exclusion.** She required emergency surgery with veno-arterial ECMO support.



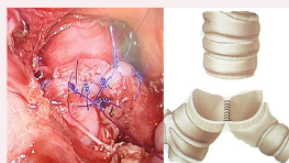
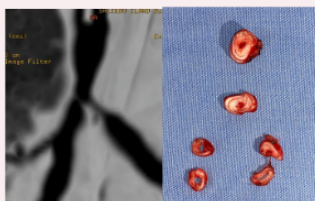
Postoperative Xr, recover the right lula. The follos after one year is asytmatic

Resection of the distal trachea and left bronchial ring, reinsertion of the upper lobar bronchus, and enlargement plasty of the intermediate bronchus. Right bronchial restenosis was later managed with dilation. One year later, the patient remains symptom-free.



PATIENT 3:

An extremely premature female with intubation for two months, 2,9kg with **90% distal tracheal stenosis, 80% left main bronchus stenosis, and 20% right main bronchus stenosis.**



Carinal reconstruction was performed under bypass support.

Here is the pre and posoperative bronchoscopy. First one with the stenosis and the follow-up that confirmed resolution of all stenosis

