8th WORLD CONGRESS of PEDIATRIC SURGERY
WOFAPS
12-15 November 2025
Titanic Mardan Palace Hotel
ANTALYA, TÜRKİYE

# Intrathoracic Ectopic Kidney with Pulmonary Sequestration: Clinical and Surgical Insights: a Case Report

## Introduction

Intrathoracic ectopic kidney is a rare, often asymptomatic congenital anomaly, usually detected incidentally on chest X-rays in children aged 3–14. It represents under 5% of ectopic kidneys, with surgery reserved for symptomatic or complex cases[1,2]. Pulmonary sequestration involves nonfunctioning lung tissue with systemic blood supply, classified as extralobar or intralobar. Diagnosis is imaging-based, and treatment typically includes thoracotomy and lobectomy with low complication risk[3,4].

## Case Report

A 7-month-old infant presented with recurrent respiratory distress during breastfeeding, chest infections, and failure to thrive. Imaging revealed a right intrathoracic ectopic kidney and suspected pulmonary sequestration. Thoracotomy confirmed Gerota's fascia adherence to a collapsed lung lobe. Sequestration vessels were ligated, the lung re-expanded, and the kidney left in place. Postoperative recovery was smooth, with chest tube insertion and no complications.

Figure 1: Shows dissection of the sequestration (yellow arrow) and ectopic kidney after separation from fascia of gerota (can see the renal capsule) (blue arrow).

## Disscussion

Intrathoracic ectopic kidney, typically left-sided and more common in males, is often asymptomatic and incidentally found on imaging. This case adds to rare reports of its coexistence with pulmonary sequestration. CT and thoracotomy confirmed intralobar sequestration without diaphragmatic defect. Surgical release restored lung function; the kidney was left in place. Recovery was smooth, highlighting the value of tailored, anatomy-based management

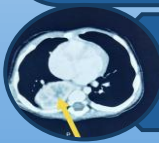

Figure 2 : Axial view CT scan shows right intrathoracic kidney (arrow)

## Conclusion

Intrathoracic ectopic kidney with pulmonary sequestration poses a unique clinical challenge. This case underscores the need for heightened awareness and a multidisciplinary strategy to optimize outcomes. Ongoing documentation of such rare anomalies is vital for advancing understanding and improving management.

## References

1. Chong SL, Chao SM. Intrathoracic kidney as mediastinal mass. Proc Singapore Healthc, 2012.
2. Toledo I et al. Ectopic intrathoracic kidney. Arch Argent Pediatr, 2013.
3. Lai CF et al. Thoracic kidney with ureteral duplication. Nephrol Dial Transplant, 2006.
4. Yalcinbas YK et al. Thoracic kidney diagnostic dilemma. Ann Thorac Surg, 2001.

Isam Ahmed Abdeljaleel Taha [1], Mohamed Y Ibrahim [2], Mohamed Helali [3], Mahir A. A. Yousef[4], Baha Aldeen Alshareif [5], Hala Altayeib [6], Razan Idriss [7], Esra S Abdalgadir, Sami Mohamed Elamin Taha [8]