OPEN ACCESS

CLINICAL IMAGE

Rev. Ang. de Ciênc. da Saúde. 2026; 7(1): eRACSaúde.v7i1.2026.02
e-ISSN: 2789 - 2832 / p-ISSN: 2789 - 2824
Equipa Multidisciplinar de Profissionais de Saúde, Docentes e Investigadores Nacionais

Childhood Pneumonectomy for Tuberculosis: Radiologic Findings 46 Years Later

Pneumonectomia na Infância por Tuberculose: Achados Radiológicos 46 Anos Depois

Mauer A. A. **Gonçalves**[1], Humberto **Morais**[1,2]; Mirella de Carvalho **Correia**[3]; Fidel **Caceres-Loriga**[4]

Keywords: Pneumonectomy; Tuberculosis; Thoracic surgery
Palavras – Chave: Pneumonectomia; Tuberculose; Cirurgia torácica

A 52-year-old man presented with asymptomatic arterial hypertension. His medical history was notable for a left pneumonectomy performed at age 8 for pulmonary tuberculosis (1980). Physical examination revealed a well-healed, extensive left posterior thoracotomy scar (Fig 1A), asymmetric chest expansion, and absent breath sounds over the left hemithorax. Chest radiography (Fig 1B) showed homogeneous opacification of the left hemithorax with a marked ipsilateral shift of the mediastinum and trachea. Computed tomography (Fig 1C) confirmed the complete absence of the left lung, severe volume loss, and a marked ipsilateral shift of mediastinal structures. The right lung showed significant compensatory hyper-

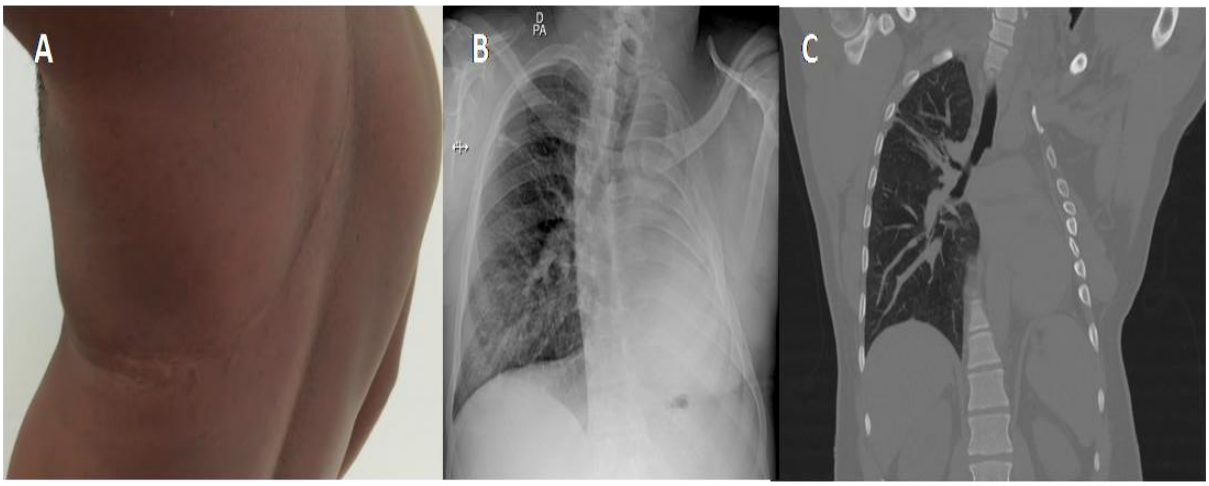

Figure 1 – (A) Extensive left posterior thoracotomy scar. (B) Chest radiography showed homogeneous opacification of the left hemithorax with a marked ipsilateral shift of the mediastinum and trachea. Computed tomography. (C) Computed tomography confirmed the complete absence of the left lung, severe volume loss, and a marked ipsilateral shift of mediastinal structures.

1- Center for Advanced Studies in Medical Education and Training, Faculty of Medicine, Agostinho Neto Uni versity, Luanda, ANGOLA.
2- Cardiology Department, Hospital Militar Principal Instituto Superior, Luanda, ANGOLA.
3- Huambo General Hospital, Huambo, ANGOLA.
4- Doctors HealthCare, Florida, USA.
✉ - Corresponding Author. Email: mauergoncalves@gmail.com
DOI: https://doi.org/10.54283/eRACSaude.v7i1.2026.02

inflation and transmediastinal herniation across the midline. While total pneumonectomy via large thoracotomy was once a primary intervention, it is now strictly reserved as a "salvage" procedure for multidrug-resistant tuberculosis or "destroyed lung" syndrome[1,2]. Furthermore, contemporary thoracic surgery prioritizes lung-sparing resections and minimally invasive techniques, such as video-assisted thoracoscopic surgery (VATS) or robotic surgery, which have largely replaced the invasive approaches of the past[2,3].

This case illustrates the remarkable anatomical remodelling and long-term physiological adaptation following a pneumonectomy in childhood. It also highlights the extraordinary plasticity of the developing lung: when pneumonectomy occurs at an early stage of life, the remaining lung can undergo substantial compensatory growth and functional adaptation, allowing functional status to be preserved decades after the loss of an entire lung.

Acknowledgments: The authors declare that no AI tools were used during the preparation of this work.

Protection of humans and animals: The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and the Helsinki Declaration of the World Medical Association, updated in October 2024.

Data confidentiality: The authors declare having followed the protocols in use at their working center regarding patients' data publication.

Patient consent: Obtained.

Conflicts of interest: All authors have no conflicts of interest to declare.

Funding sources: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

1. Senbu MF, Gulilat D, Habtamu HT. Indications, contributing factors, and short-term outcomes of pneumonectomy: an 8-year retrospective study in a resource-limited setting. J Cardiothorac Surg. 2025 Feb 5;20(1):120. doi: 10.1186/s13019-024-03268-8
2. Piwkowski C, Gabryel P, Roszak M, Perek B, Kasprzyk M. Short- and long-term outcomes of thoracoscopic pneumonectomy - single center experience. Wideochir Inne Tech Maloinwazyjne. 2021 Jun;16(2):369-376. doi: 10.5114/wiitm.2021.103923
3. Yutaka Y, Ng CSH. Editorial: Recent advances in minimally invasive thoracic surgery. Front Surg. 2023 Mar 24;10:1182768. doi: 10.3389/fsurg.2023.1182768