https://doi.org/10.29309/TPMJ/2025.32.02.8315

The Professional Medical Journal
www.theprofesional.com
2025, Volume, 32 Issue, 02

CASE REPORT

Early interruption of left pulmonary artery: A rare cause of repeated chest infections.

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Article Citation: Bashir Z. Early interruption of left pulmonary artery: A rare cause of repeated chest infections. Professional Med J 2025; 32(02):246-248. https://doi.org/10.29309/TPMJ/2025.32.02.8315

ABSTRACT...

1. To highlight the presence of pulmonary artery interruption as an important cause for investigating repeated chest infections.
2. To emphasize on the fundamental role of CT chest in the diagnosis.
3. To manifest the importance of conveying this rare cause of repeated chest infection to the treating team.

Key words: Pulmonary Artery, Congenital Interruption, CT Chest.

INTRODUCTION OF PULMONARY ARTERY INTERRUPTION

Pulmonary arteries arise from the sixth aortic arches. From the ventral aspect of right sixth aortic arch arises right pulmonary artery while from the anterior aspect of left sixth aortic arch arises left pulmonary artery. The proximal interruption of pulmonary artery is characterised by abrupt termination of right or left pulmonary artery at the hilum and presence of multiple collateral vessels supplying the affected lung. The patient may remain asymptomatic or may present with a symptom of pulmonary hypertension, chronic chest infections or hemoptysis. Usually, the unilateral pulmonary artery interruption is associated with cardiac anomalies but in this case, no cardiac anomaly was found. However, pulmonary arterial hypertension was detected due to back pressure.

CASE SUMMARY

This case is concerning a female patient, 36 years old, who was presented to the emergency department with repeated chest infections. She was advised CT test with contrast. The CT chest with contrast was conducted, which revealed a unique and rare cause of repeated chest infections, consisted of the following:

A. Early interruption of left pulmonary artery with proximal dilatation leading to pulmonary artery hypertension.
B. Mediastinal and chest wall collateral vessels to supply the ipsilateral left lung.
C. Parenchymal bands.
D. Few bronchiectatic changes in the left lower lobe.

The above said features were because of the early interruption of pulmonary artery, which led the patient to present in the emergency department. The left lung was smaller in size as compared to the right side and mild ipsilateral mediastinal shift was noted.

Image No-1

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Article received on: 22/07/2024
Accepted for publication: 09/01/2025

In this image, early interruption of left pulmonary artery is seen before branching leading to back pressure and pulmonary arterial hypertension. Mediastinal collateral is also seen.

In this image, left lung is small in size than right lung. Mild ipsilateral mediastinal shift is also seen.

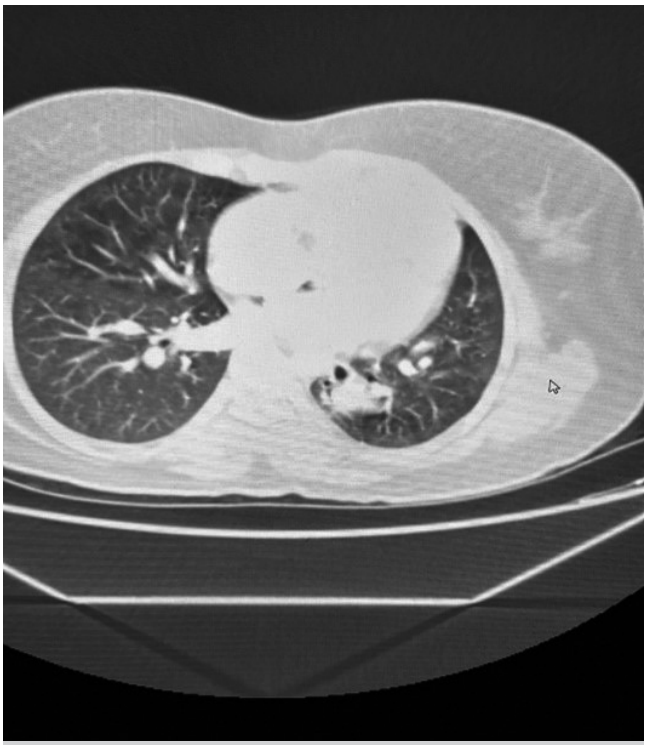

Image No-2

Patient Information Table

Attribute	Details
Age	36 Years 5 Months
Gender	Female
Nationality	Bangladesh
Occupation	Housewife

CONFLICT OF INTEREST

The authors declare no conflict of interest.

SOURCE OF FUNDING

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

Bronchiectatic charges are seen in left lower lobe suggesting chest infection.

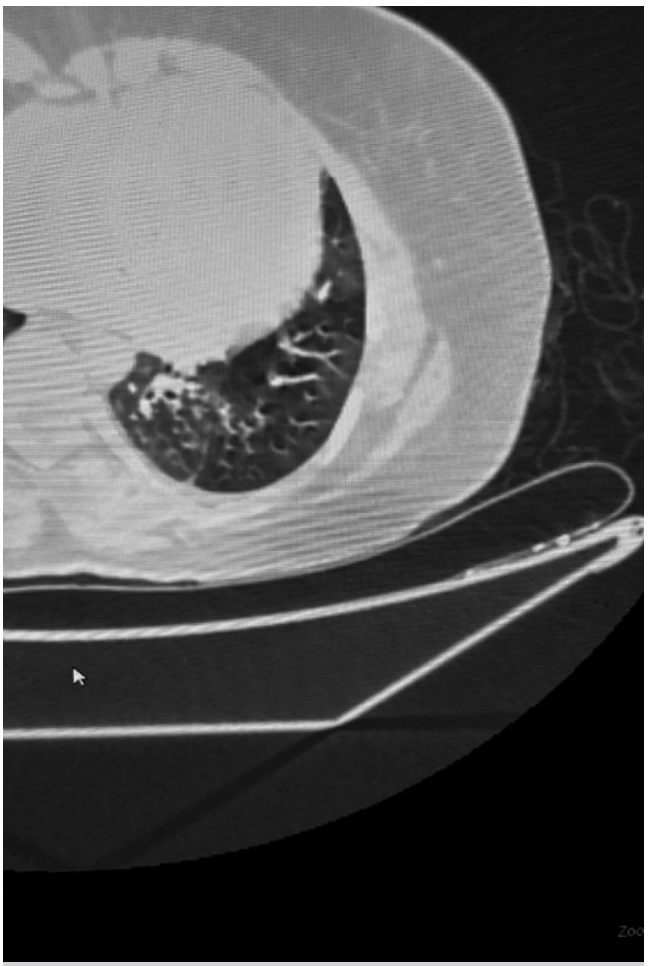

Image No-3

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AUTHORSHIP AND CONTRIBUTION DECLARATION

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