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

Thoracoscopic Talc Pleurodesis for Recurrent Pneumothorax in Children: A Two-Case Experience

[1]Nedra Zouabi,[1]Sami Sfar,[1]Afef Toumi, [1]Samia Belhssan, [1]Maroua Messaoud, [2]Sawssen Chakroun, [2]Maha Ben Mansour, [1]Amine Ksiaa, , [1]Mongi Mekki, [1]Mohssen Belghith, [1]Lassaad Sahnoun.
[1]Pediatric Surgery Dapartment, Fattouma Bourguiba Hospital
[2]Pediatric anaesthesia and intensive care department, Fattouma Bourguiba Hospital

Introduction:

Recurrent pneumothorax in children, though less common than in adults, presents a significant therapeutic challenge.

When conservative measures and chest tube drainage fail to prevent recurrence, surgical intervention becomes necessary.

Pleurodesis with talc insufflation is a widely used technique aimed at obliterating the pleural space to prevent further episodes.

This study aims to review the indications and outcomes of talc pleurodesis in children with recurrent pneumothorax.

Materials:

This is a retrospective study examining cases of recurrent pneumothorax in children managed with talc pleurodesis.

Results:

Two patients underwent talc pleurodesis for recurrent pneumothorax in our department.

The first, an 8-year-old boy with no underlying respiratory disease, presented with a total right pneumothorax, managed initially with multiple chest drains, all followed by recurrence.

After an unsuccessful thoracoscopy with pleural brushing, a second thoracoscopy revealed a subpleural bulla on the right lower lobe, which was resected. Talc pleurodesis and chest drainage were then performed.

The second patient was 11 years old with a medical history of β-thalassemia and bronchiectasis.

He had been hospitalized three times for recurrent left-sided pneumothorax. During his fourth hospitalization for right-sided pneumothorax, the patient underwent right thoracoscopy.

Intraoperative exploration revealed multiple blebs. Pleural abrasion and talc pleurodesis were performed, followed by placement of a chest drain.

The postoperative course was marked by the absence of pneumothorax recurrence in both patients.

Conclusion:

Talc pleurodesis appears to be an effective and well-tolerated treatment for recurrent pneumothorax in children, particularly when associated with subpleural blebs or bullae.

Despite its rare use in the pediatric population, our experience supports its utility in preventing further recurrences after failure of conservative management.

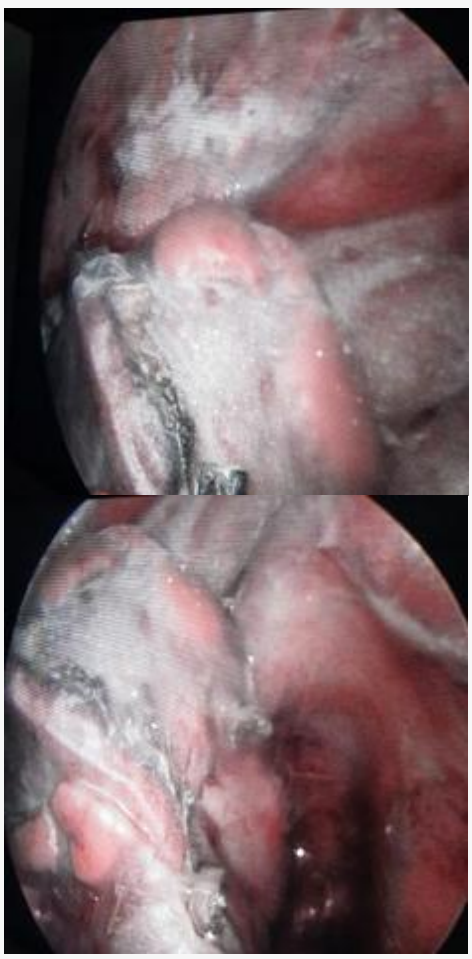

Fig. 1: Thoracoscopic Talc Pleurodesis