8th WORLD CONGRESS of PEDIATRIC SURGERY

WOFAPS

UNIVERSITÀ DEGLI STUDI DI MILANO

Extralobar pulmonary sequestrations with atypical localization or associated anomalies

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PURPOSE

Among congenital pulmonary malformations (CPM), extralobar pulmonary sequestrations (EPS) are generally characterized by lower surgical complexity compared to intralobar CPM. Atypical locations and associated malformations require greater caution in diagnosis and surgical management.

METHOD

- Retrospective study
- 2016 – 2024
- Histologic diagnosis of EPS
- Preclinical and clinical data
- Descriptive statistics

Atypical location if not basal thoracic

Associated anomalies:

- Congenital diaphragmatic hernia (CDH)
- Cardiomyopathies
- Vascular malformations

RESULTS

- 20 EPS cases

- **5 (25%) with atypical location**
  - 2 intradiaphragmatic
  - 1 intrapericardial
  - 1 mediastinal
  - 1 anterior paramediastinal

- **4 (20%) with associated anomalies**
  - 2 CDH
  - 1 diaphragmatic defect
  - 1 anomalous aortic vessel draining into the pulmonary veins

- Tecnique:
  - 5 thoracoscopy
  - 2 sternotomy
  - 2 laparotomy

- Mean surgical time: 127 minutes

Patient	Atypical location	Associated anomalies	Surgical technique
1		Anomalous aortic vessel	Thoracoscopy
2		CDH	Laparotomy
3		CDH	Laparotomy
4	Intradiaphragmatic		Thoracoscopy
5		Diaphragmatic defect	Thoracoscopy
6	Anterior Paramediastinal		Sternotomy
7	Mediastinal		Thoracoscopy
8	Intradiaphragmatic		Thoracoscopy
9	Intrapericardial		Sternotomy

CONCLUSION

In our case series, **45% of EPS presented with atypical localization or associated thoracic anomalies.** Especially in these cases, accurate diagnostic assessment is essential to tailor the therapeutic approach.