

## SIX8: MEDIASTINAL CYSTIC LESIONS: A BI-CENTRIC EXPERIENCE

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**Background** Mediastinal cystic masses in paediatric patients are rarely encountered. They can be either congenital or infective or neoplastic lesions. Due to their rarity and location close to vital organs, thoracotomy has been the traditional approach, but videothoracoscopy (VATS) has been described. The experience of two centres is herein reported.

**Materials and methods** Case notes of patients undergoing VATS for mediastinal cystic masses in two centres between March 2001 and March 2017 were reviewed. Data were collected on diagnosis, surgical details, rate of conversions, complications, histology, and follow-up.

**Results** Fourteen cases were operated. Prenatal diagnosis was available in 6 cases and in the remaining 8 the diagnosis occurred at an average age of 97 months (range 17 m- 16 years). None required an emergent procedure. The median age at resection was 62 months (6 months-16 years). VATS was accomplished with a 5 mm scope and 2-4 operative ports. Single lung ventilation was adopted in 8 cases and in 2 an oesophagoscopy was required to help with dissection from the oesophageal wall. Conversions occurred in 5 cases (35,7%) for bronchial tear (1) and poor visualization of pericystic anatomical structures (4). Postoperatively, one patient experienced pericardial effusion due to residual intrapericardial lymphangiomas that required an open approach. Another patient underwent thoracotomy on the 12th p.o day for persistent pneumothorax from iatrogenic bronchopleural fistula. Pathology showed 5 bronchogenic cysts, 3 benign cysts, 2 cystic lymphangiomas, 1 each of coelomatic cyst, mature teratoma, oesophageal duplication, and hybrid congenital mediastinal malformation. At a median follow-up of 64 months no relapse has been detected.

**Conclusions** Mediastinal cystic lesions are rare benign masses that, however, require to be resected. In experienced centres VATS with selective intubation is the preferred approach, independently from age of patients. The rate of conversion is still remarkable, mainly due to complexity and importance of vital mediastinal structures and consequences of previous infections.

**Key words** mediastinal cystic lesion, children, thoracoscopy