

Pulmonary Sequestration - 8 Cases Treated with Lobectomy

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Background and aims: Pulmonary sequestration (PS) is a rare congenital malformation where non-functioning lung-tissue is separated from the bronchial tree and vascularised with an aberrant artery from the systemic circulation. The aim of this report was to study all patients that were treated for PS at Lund University Hospital between 1994 and 2004, with emphasis on clinical presentation of the disease and evaluate the results of surgical treatment.

Material and methods: 8 cases were identified, 7 females and one male, with a mean age of 7.3 years (range 25 days - 17 yrs.) at the time of diagnosis. Clinical and histological information was gained from hospital charts and pathological records.

Results: Out of 8 patients, 7 presented with respiratory symptoms, usually correlated to pneumonia. Two patients showed signs of congestive heart failure. Five patients had other congenital malformations; including scimitar syndrome and congenital heart disease. The diagnosis of PS was confirmed with conventional angiography in 7 patients and in one with MRI-angiography. All the patients underwent a successful lobectomy. There were no major postoperative complications. At a medium follow-up of 77 months, all of the fully treated children were doing well.

Conclusion: Respiratory and cardiovascular symptoms are the most common symptoms related to PS. The wide range of clinical symptoms may cause diagnostic problems, especially in children and young adults with concomitant congenital heart disease. Therefore, PS should be considered as a differential diagnosis in children with unexplained respiratory symptoms or with signs of congestive heart failure. In patients with PS, lobectomy seems to be a good therapeutic option.