

## **Thoracoscopic Management of Complicated Parapneumonic Effusions in Young Children**

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**Objective:** To evaluate the role of thoracoscopic management of complicated parapneumonic effusions (CPE) in very young children.

**Setting:** Division of Pediatric Surgery, Salmaniya Medical Complex.

**Design:** Very young children with complicated parapneumonic effusions were prospectively studied between January 2007 and December 2008.

**Method:** Eleven patients under the age of two year with the diagnosis of complicated parapneumonic effusions underwent thoracoscopic management. The patients had chest X-ray, Ultrasound and CT scan of the chest. The patients received antibiotic 3-6 weeks prior to thoracoscopy without improvement. The patients received fibrinolytic agent on the second postoperative day. Three trocars used, one 5 mm for the camera and two 5 mm for working forceps on semilateral position.

**Result:** Eleven cases of CPE were studied during a 2-year period; the age had ranged from 5 to 24 months (average 12 months). In 3 cases, Streptococcus pneumoniae was found from pleural fluid. Two cases have chest tube before thoracoscopy. Postoperative chest tube drainage had ranged from 3-20 days (average 5 days). Postoperative Febrile days had ranged from 1- 4 days (average 2 days). Post thoracoscopy hospital stay had ranged from 5-21 days (average 7 days). No intra-operative or postoperative major complications were encountered. Three cases developed minor surgical emphysema, which resolved spontaneously. Follow up ranging from 6-12 months (average 6 months) resulted normal recovery and good cosmesis.

**Conclusion:** In this study, the initial outcome of thoracoscopic management of complicated parapneumonic effusions in very young children was safe and effective. Randomized controlled study will lead to the development of standards therapy in these cases.