

SIX12: THORACOSCOPIC PULMONARY LOBECTOMY IN INFANTS YOUNGER THAN 3 MONTHS OLD

Catarina Barroso*¹, Ruben Lamas-Pinheiro¹, José Luís Carvalho², Angélica Osório², Helena Salgado³, Marta Gonçalves³, Maria João Santos³ and Jorge Correia-Pinto¹
E-mail: Catarina Barroso — catabarroso@gmail.com

¹Life and Health Sciences Research Institute, School of Medicine, University of Minho; ICVS/3B's – PT; Government Associate Laboratory; Department of Pediatric Surgery, Hospital de Braga, Portugal; ²Department of Pediatric Surgery, Hospital de Braga, Portugal; ³Department of Anaesthesiology, Hospital de Braga, Portugal

Background Thoracoscopic lobectomy for congenital cystic lung lesions is generally accepted, namely in asymptomatic children older than 6 months old. The safety and efficacy of resections in younger symptomatic children have been questioned, due to the smaller size, tissue fragility and technical demands of unilateral lung ventilation.

Materials and methods In the last 2 years, 3 children younger than 3 months old underwent thoracoscopic left upper lobectomy at our department. All presented with respiratory distress. Two had congenital lobar emphysema and one had megacystic congenital pulmonary airway disease and post-operative histologic diagnosis of pleuropulmonar blastoma. All infants were operated under unilateral lung ventilation that was monitored by thoracic ultrasound (Sliding lung sign | Marching-ants appearance).

Results We completed 3 thoracoscopic left upper lobectomies. Patient age at operation ranged from 17 days to 3 months and weight from 3.1 to 6 kg. Operative time ranged from 145 to 195 minutes. There were no intraoperative or post-operative complications. All of them were orally fed on the first 24h of the procedure. Hospital length of stay ranged from 3 to 5 days.

Conclusions Thoracoscopic pulmonary lobectomy is safe and feasible even in symptomatic infants younger than 3 months old with congenital lobar emphysema and megacystic pulmonary airway disease.

Key words congenital lobar emphysema, megacystic pulmonary airway disease, thoracoscopic lobectomy, infants younger than 3 months