

Strategies for Managing Neonates with Congenital Lung Mass Presenting with Respiratory Distress

chang xu¹, Taozhen He¹, Xiaoyan Sun¹, Dengke Luo¹, Shiyi Dai¹, Miao Yuan¹, Gang Yang¹, and Kaisheng Cheng¹

¹Sichuan University West China Hospital

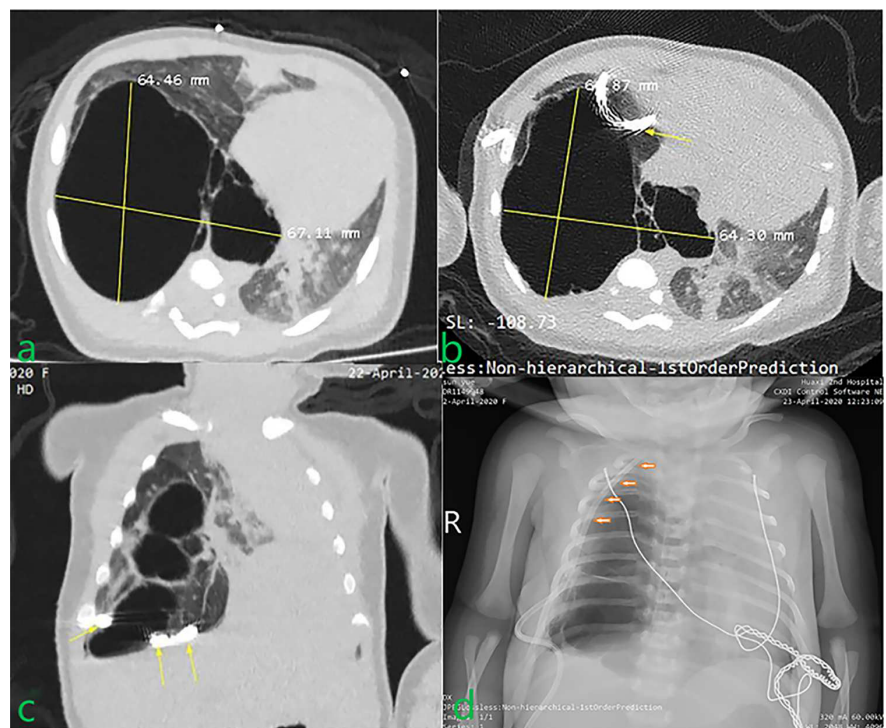
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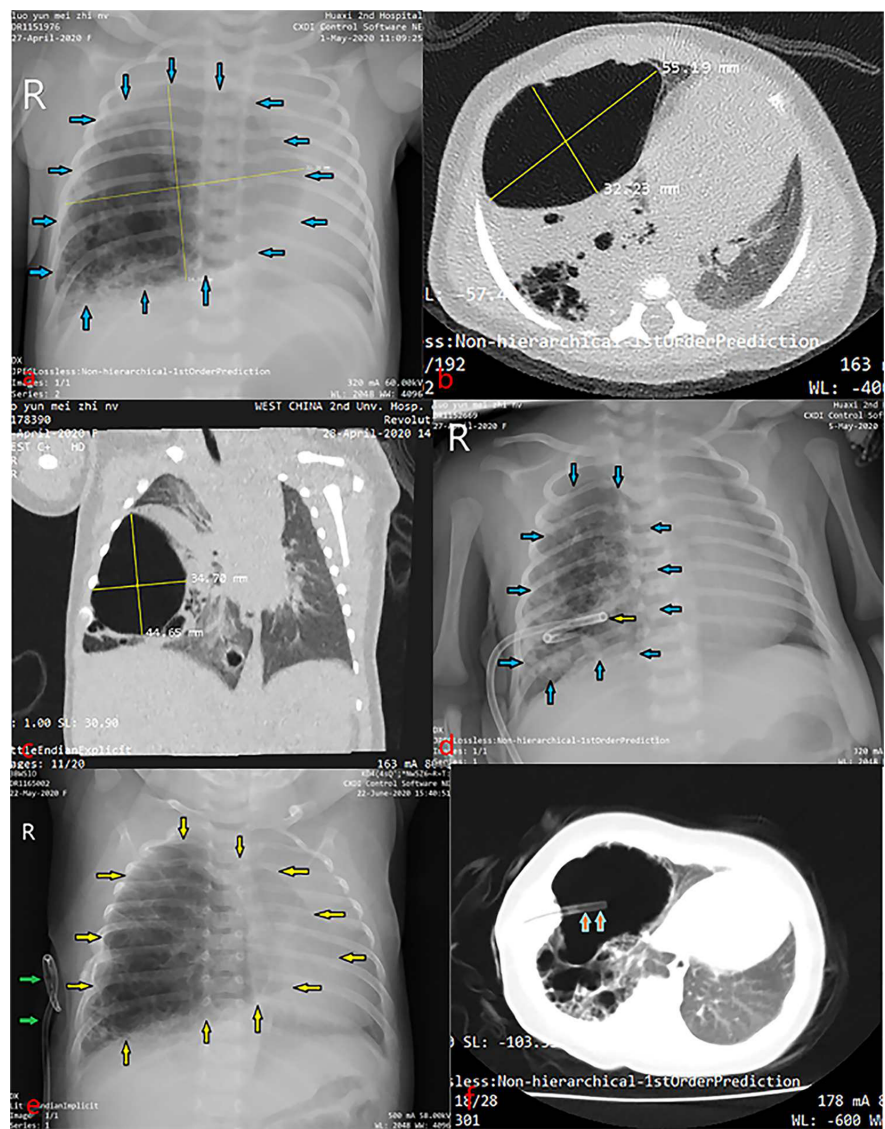
Abstract

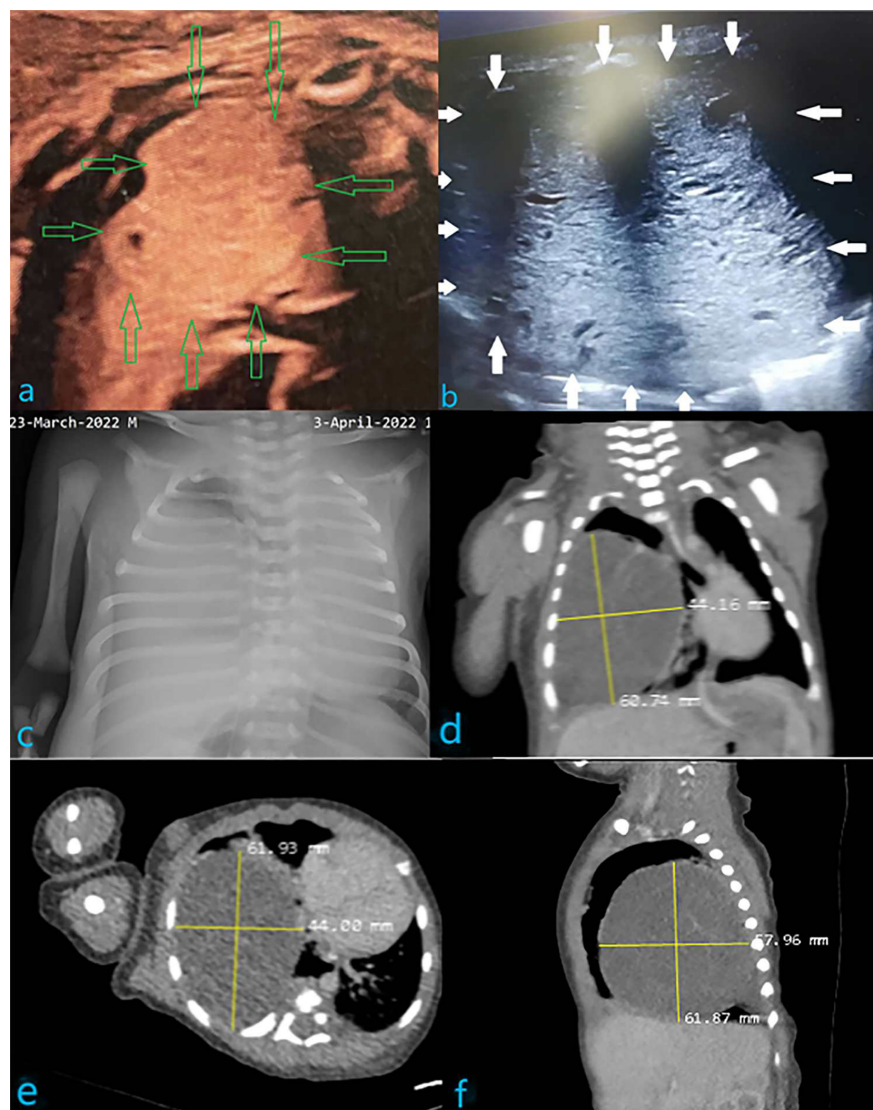
Introduction: It is rarely seen that neonates with congenital lung mass presenting with respiratory distress require emergency intervention. No consensus has been achieved concerning the best policy facing such condition. This study aims to evaluate the efficacy and safety of our strategies in managing neonates with congenital lung mass presenting with respiratory distress. **Methods:** We retrospectively reviewed the data of five congenital lung mass (CLM) neonates presenting with respiratory distress from April 2020 to April 2022 for whom different strategies were adopted and favorable outcomes were obtained. The relevant data was reviewed and analyzed. **Results:** All the patients were prenatally diagnosed with CLM, and among them, four neonates with cystic lung masses accepted percutaneous thoracic catheter drainage prior to surgery. The first neonate with macrocystic lung mass experienced prompt open lobectomy due to failure of drainage. The other three patients obtained good drainage of the large air-filled cyst, thus gaining the opportunity for elective thoracoscopic surgery in median 48 d. The fifth patient directly underwent emergency surgery due to the solid nature of the lung lesion. **Conclusions:** For neonates with cystic lung masses presenting with respiratory distress due to mediastinal compression, percutaneous thoracic catheter drainage and subsequent elective thoracoscopic surgery were superior to emergency thoracotomy in terms of safety and parenchyma-sparing surgery based on the study and literature. For those with solid lung lesions whose CVR value is no less than 1.6, either EXIT surgery or emergency thoracotomy is a reliable strategy depending on the medical resources available.

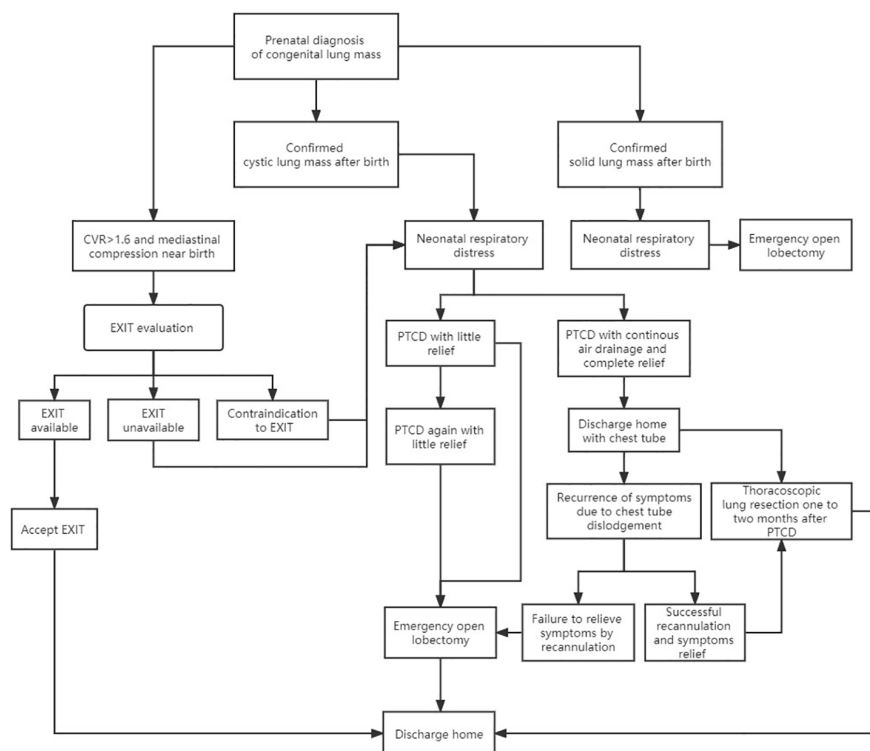
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