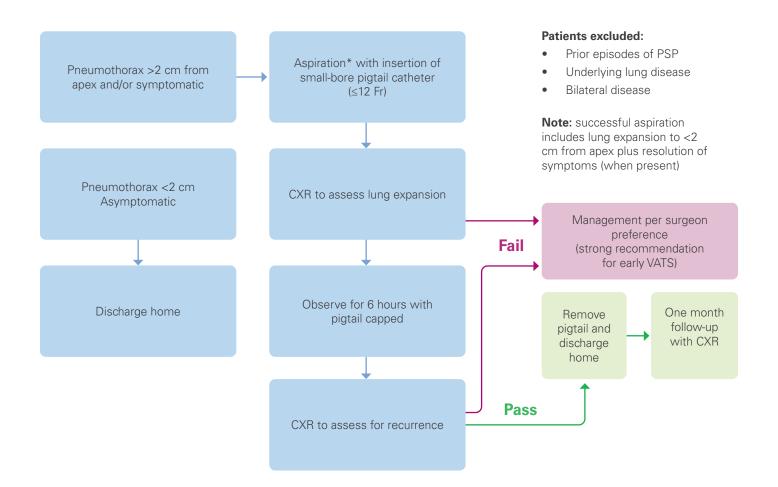
Clinical Guideline

Spontaneous pneumothorax

Pediatric surgery and emergency medicine





For questions concerning this guideline, contact: chorclinicalguidelines@vcuhealth.org chrichmond.org Last updated: January 2023 Next expected update: January 2026

Clinical Guideline

Spontaneous pneumothorax

Pediatric surgery and emergency medicine

*Aspiration technique:

- Use pleural pigtail catheter kit to place <12 Fr catheter using Seldinger technique
 - 4th or 5th intercostal space, anterior axillary line
- To evacuate pneumothorax:
 - EITHER use a 60 mL syringe to aspirate air until no more air can be removed
 - OR hook the catheter to a pleuravac and wall suction until bubbling stops
- Get a Chest X-ray
- After confirmation that pneumothorax is resolved (e.g. lung <2 cm from apex of chest, symptoms improved) the pigtail can be clamped/capped
- PEM to consult pediatric surgery prior to pigtail placement (if not emergent) for input on management
- Preferably, PEM will place pigtail catheter, with assistance from pediatric surgery when available or by PEM attending request



Spontaneous Pneumothorax Guideline **Executive Summary**

Children's Hospital of Richmond at VCU Spontaneous Pneumothorax Workgroup

Pediatric Surgery Owner: Jason Sulkowski, MD, Pediatric Emergency Medicine: Judy Barto, MD

Approved (January 2023)

Chief of Pediatric Surgery: Charles Bagwell, MD **Chief of Pediatric Emergency Medicine:** Frank Petruzella MD, MS

CHOR Clinical Guidelines Committee: Jonathan Silverman, MD, MPH; Ashlie Tseng, MD CHOR Quality Council, Executive Sponsor: Elizabeth Peterson RN, MPH, CPHQ Matthew Schefft, DO, MSHA

References:

Guidelines Reviewed:

Leys CM, Hirschl RB, Kohler JE, et al. Changing the paradigm for management of pediatric primary spontaneous pneumothorax: a simple aspiration test predicts need for operation. J Pediatr Surg. 2020; 55(1): 169-75.

Citation

Title: **Spontaneous Pneumothorax** *Authors:* Children's Hospital of Richmond at VCU Jason Sulkowski, MD Judith Barto, MD

Date: November 2022

Retrieval website: http://www.chrichmond.org/clinical-guideline-Spontaneouspneumothorax

Example: Children's Hospital of Richmond at VCU. Sulkowski J, Barto J, Spontaneous Pneumothorax Guideline. Available from: http://www.chrichmond.org/clinical-guideline-Spontaneouspneumothorax



For questions concerning this guideline, contact: chorclinicalguidelines@vcuhealth.org chrichmond.org Last updated: January 2023 Next expected update: January 2026