

Case-Based Learning and Morbidity and Mortality: Case 1

Robert Suh, MD

Disclosures

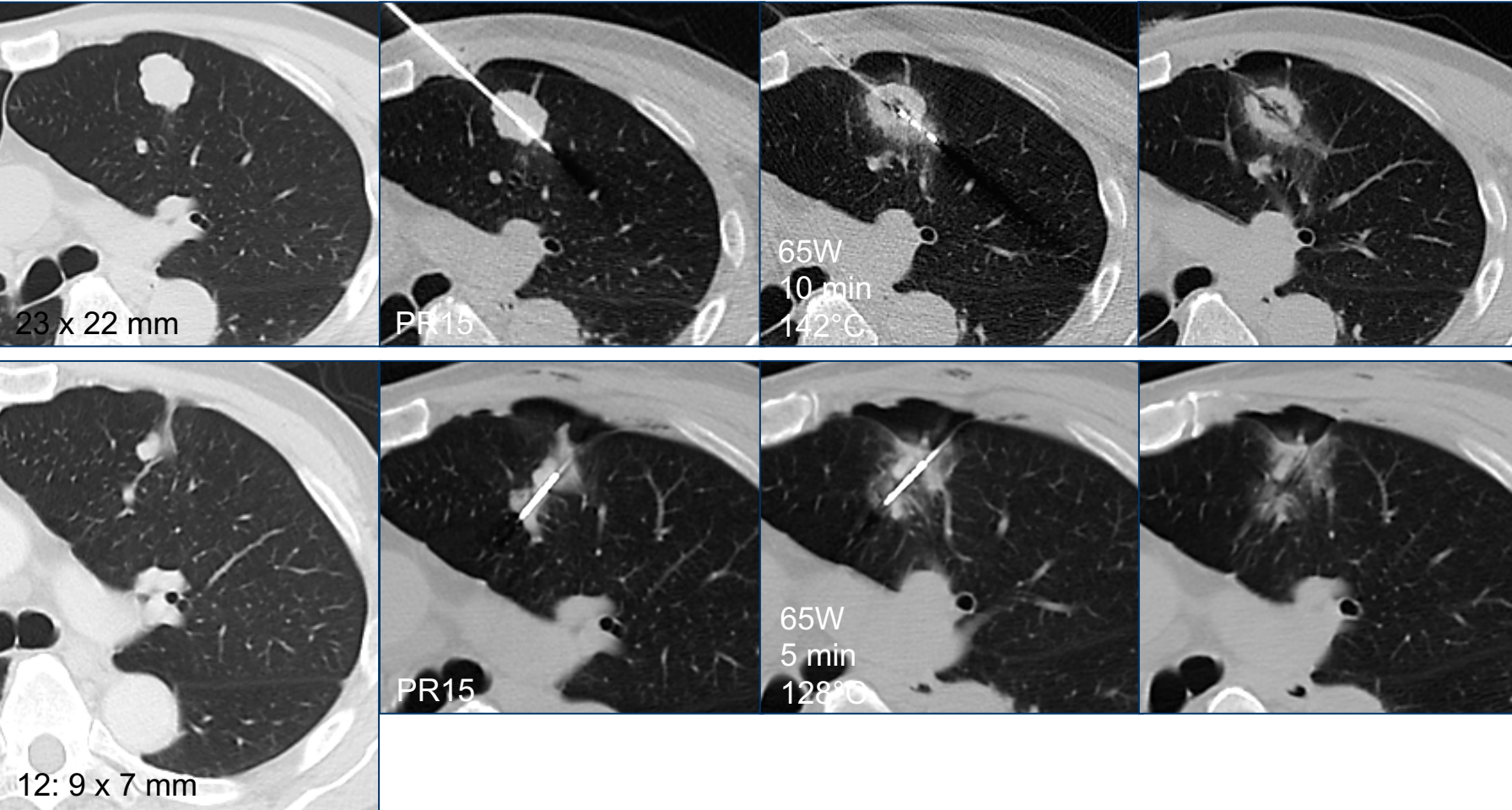
Robert Suh: Consultant – Boston Scientific, NeuWave Medical;
Speakers' Bureau – Boehringer Ingelheim

*Brand names are included in this presentation for participant clarification purposes only.
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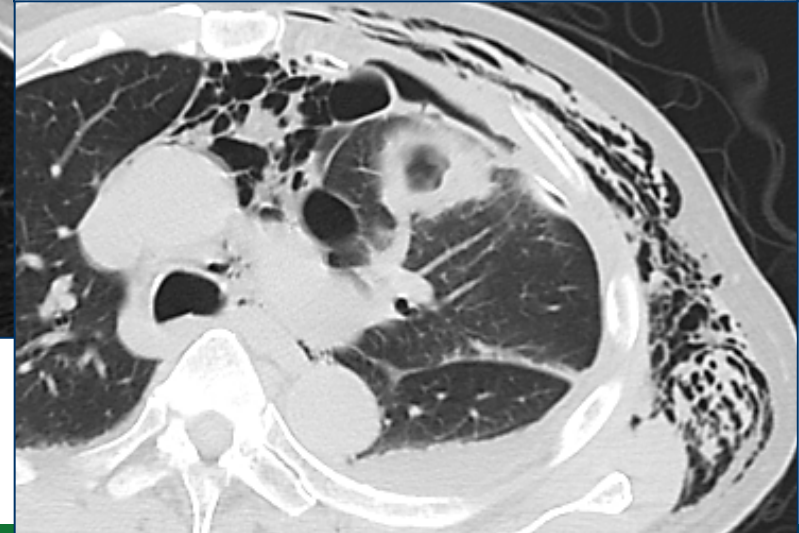
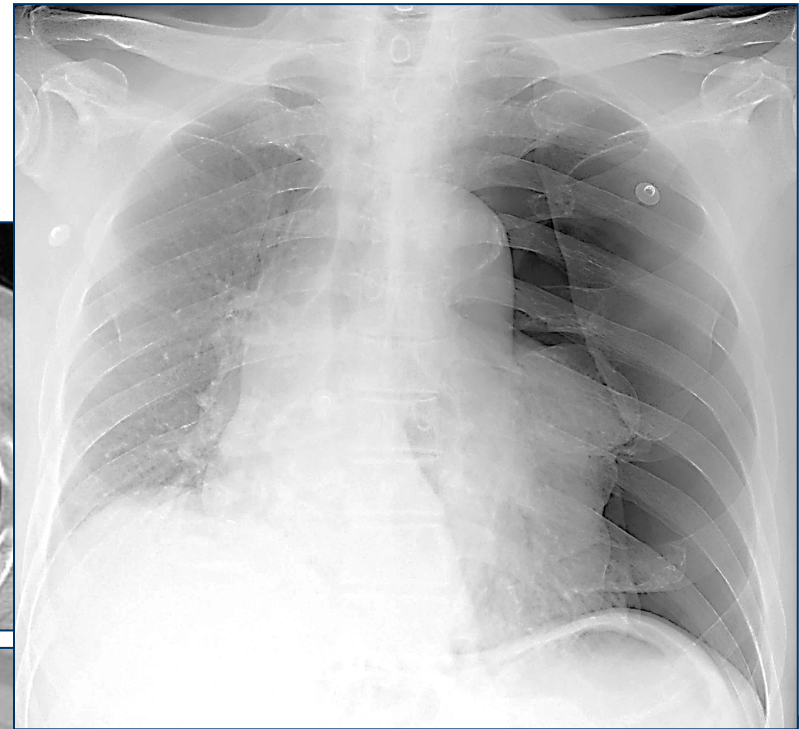
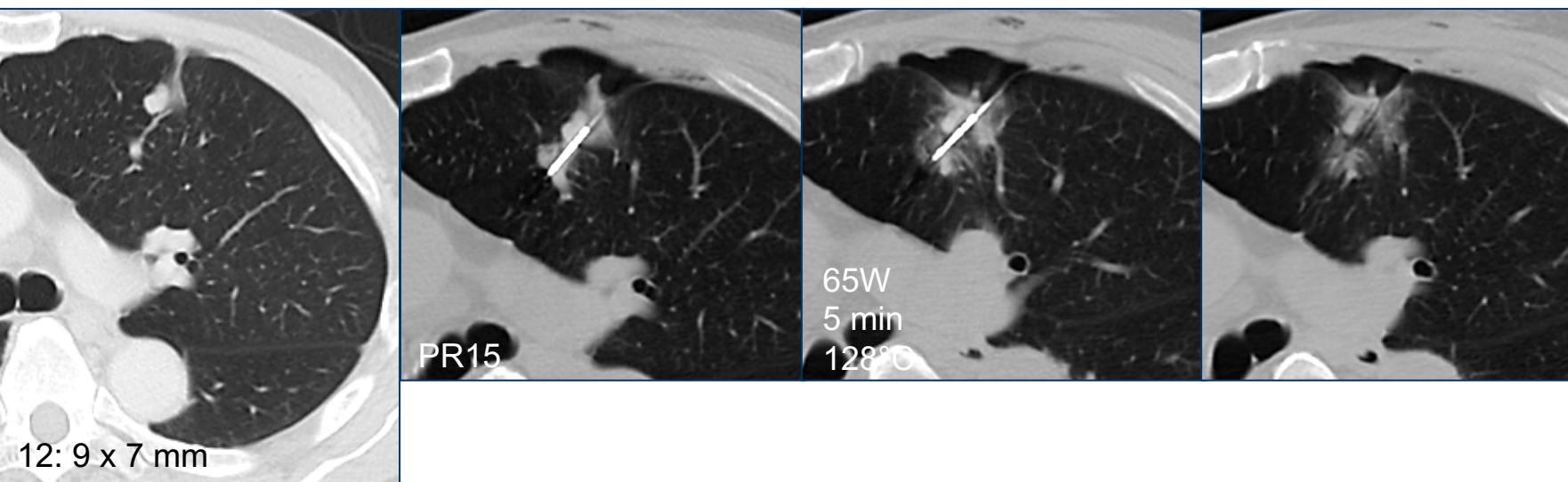
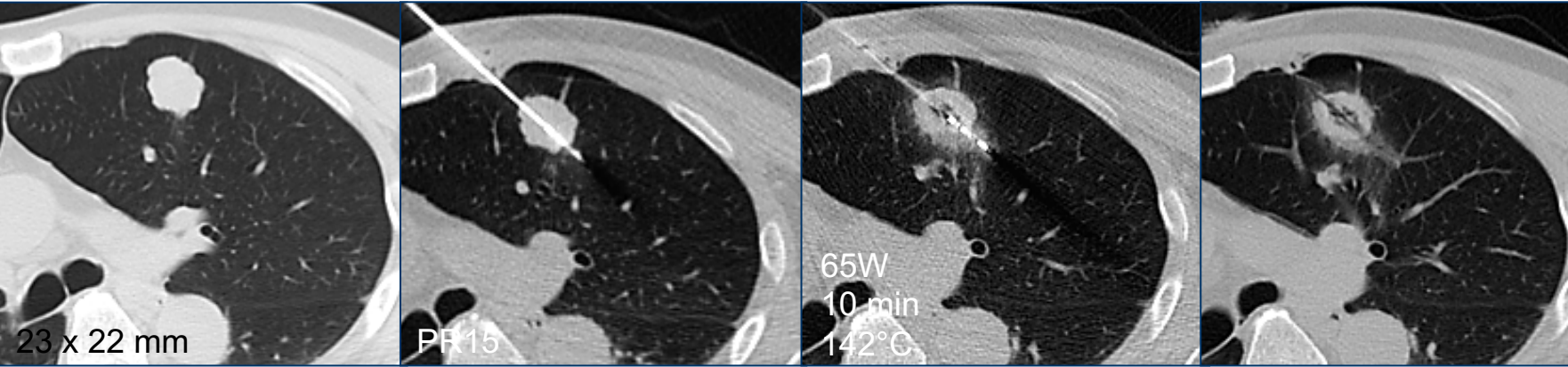
Case 1

- 73-year-old male
 - Hepatitis B (entecavir and vemlidy)
 - AFP-producing hepatocellular carcinoma
 - Left lateral hepatic resection 9/2011
 - Liver thermal ablations x5; last 12/2014 segment 7/8
 - Lung thermal ablations x4; last 9/2015

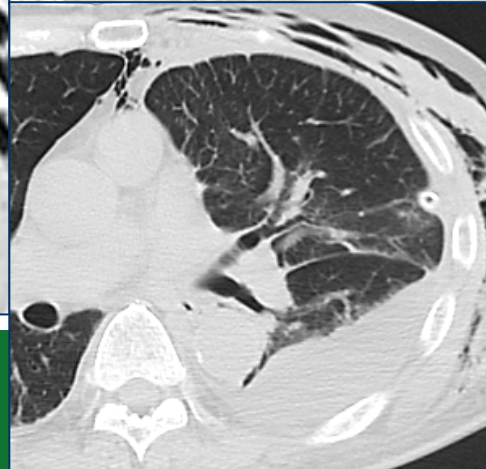
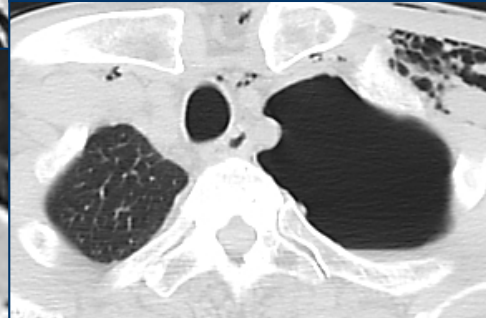
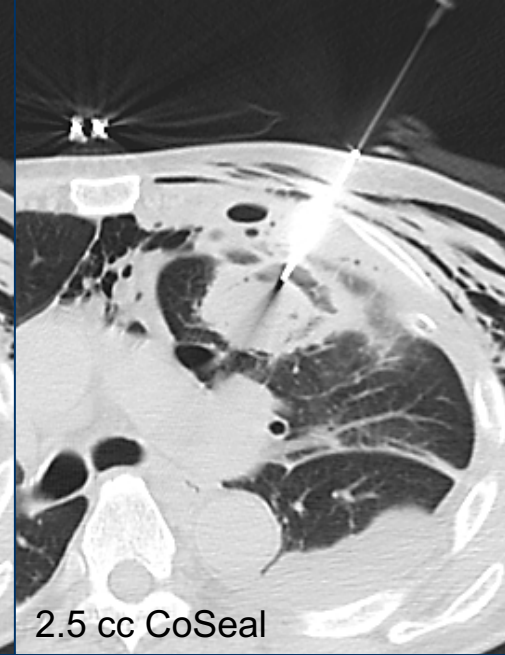
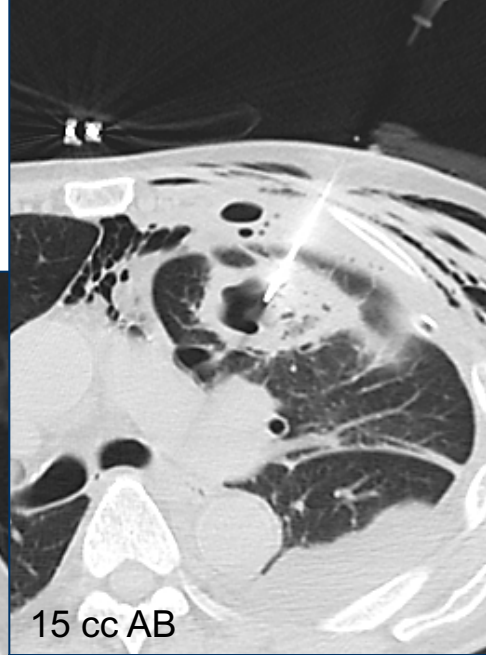
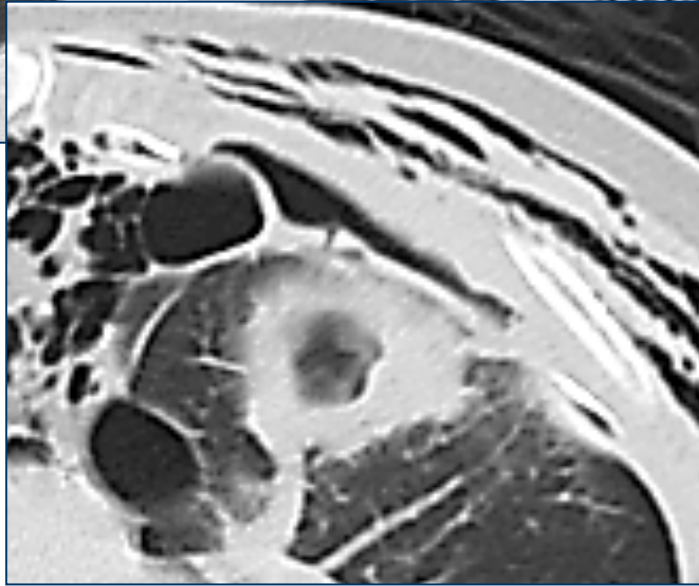
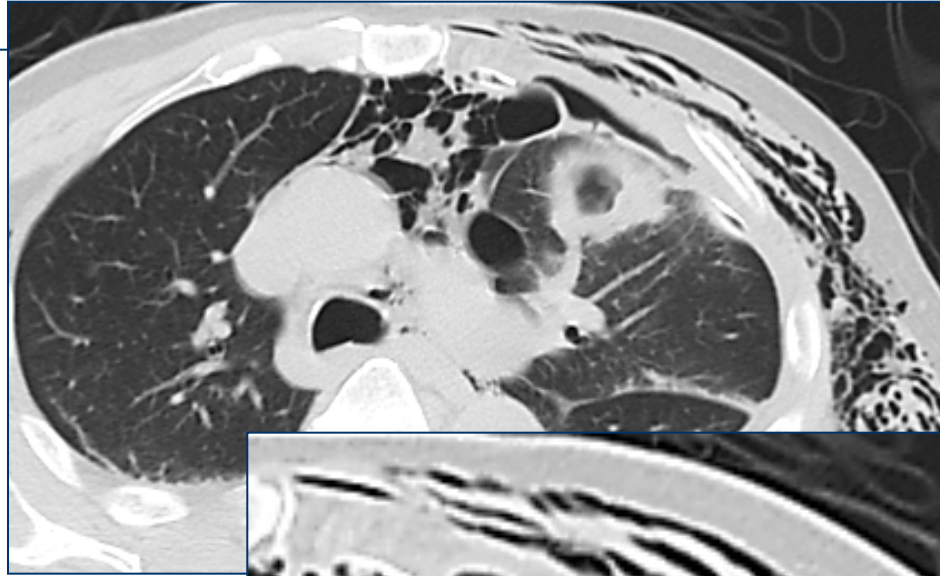
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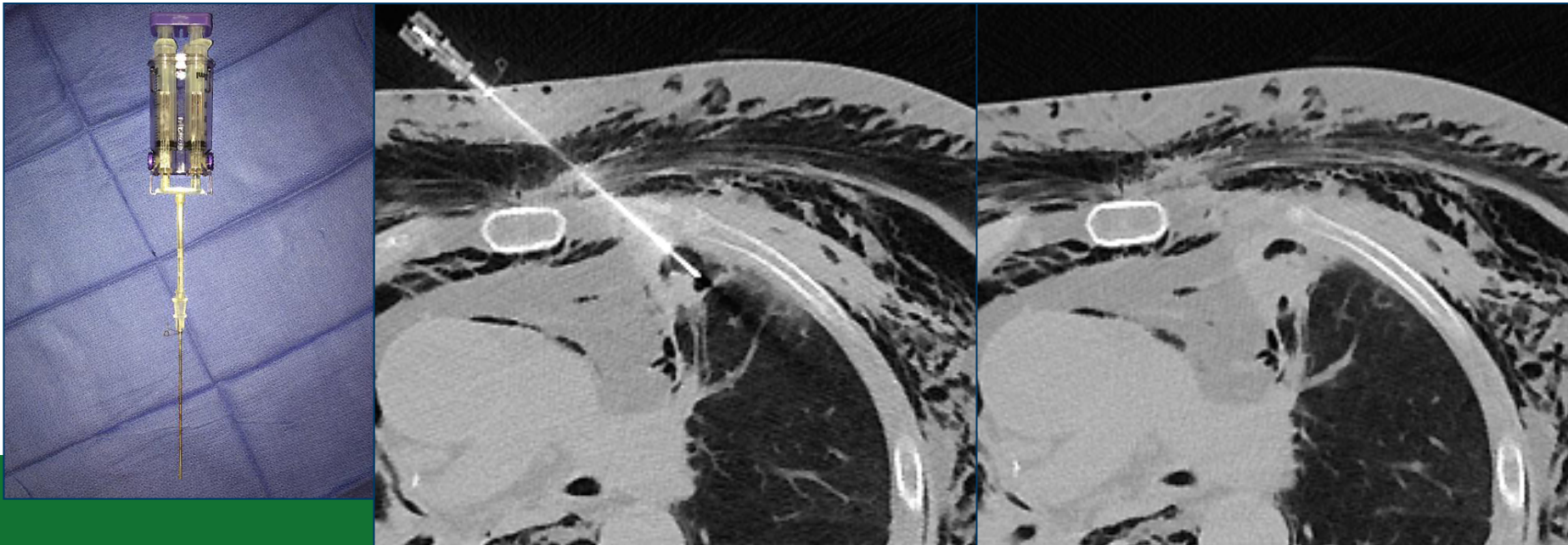


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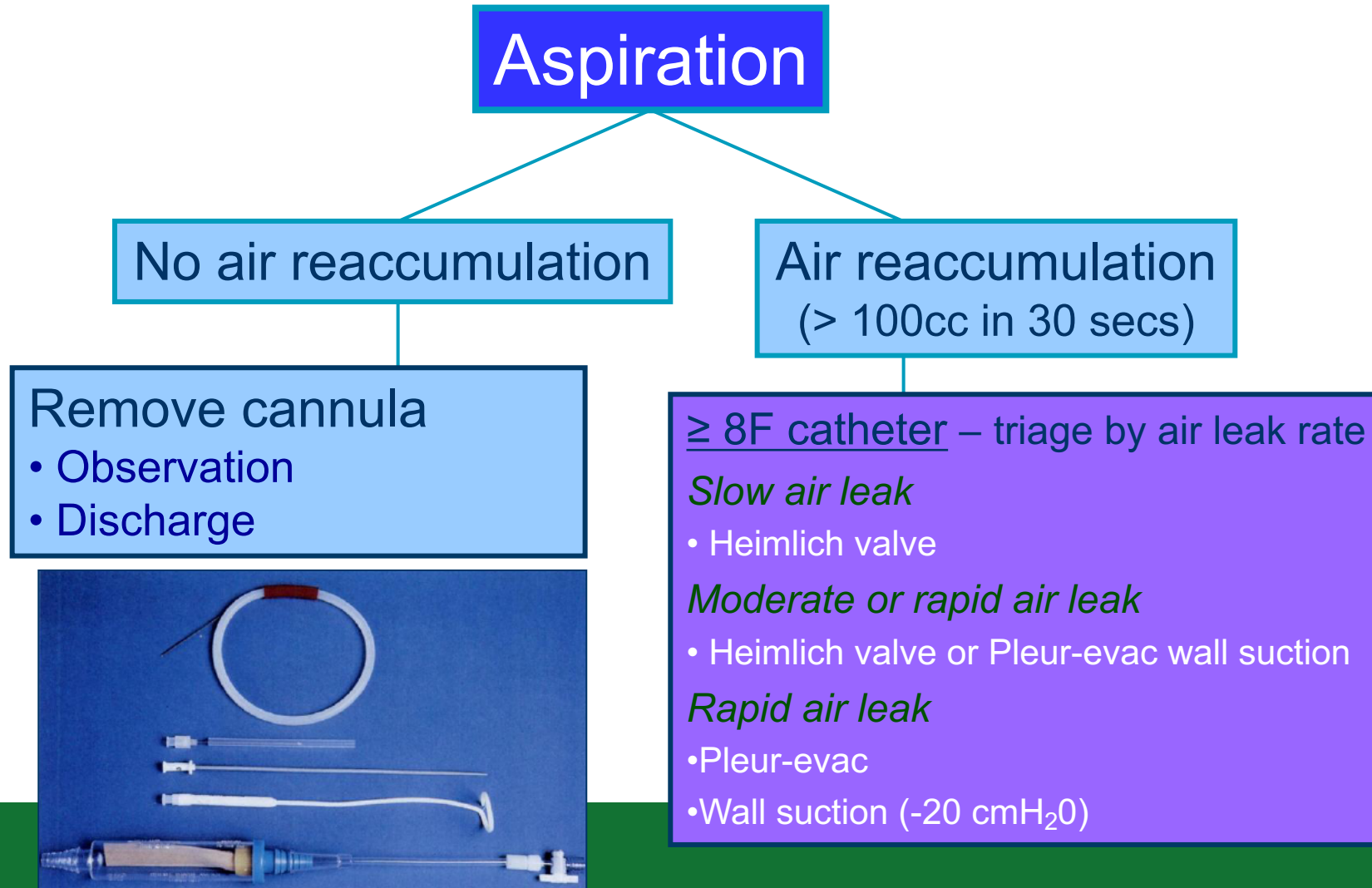


Case 1

- Synthetic hydrogel surgical sealant
 - *Biocompatible polyethylene glycol polymer that rapidly cross-links with proteins in tissue to adhere to the area of application*
 - FDA approved for arterial and venous reconstructions
 - 10 minutes to achieve sealing; 4x volume by 24 hours



Complication Management: Pneumothorax



Complication Management: Pneumothorax

- Management Considerations

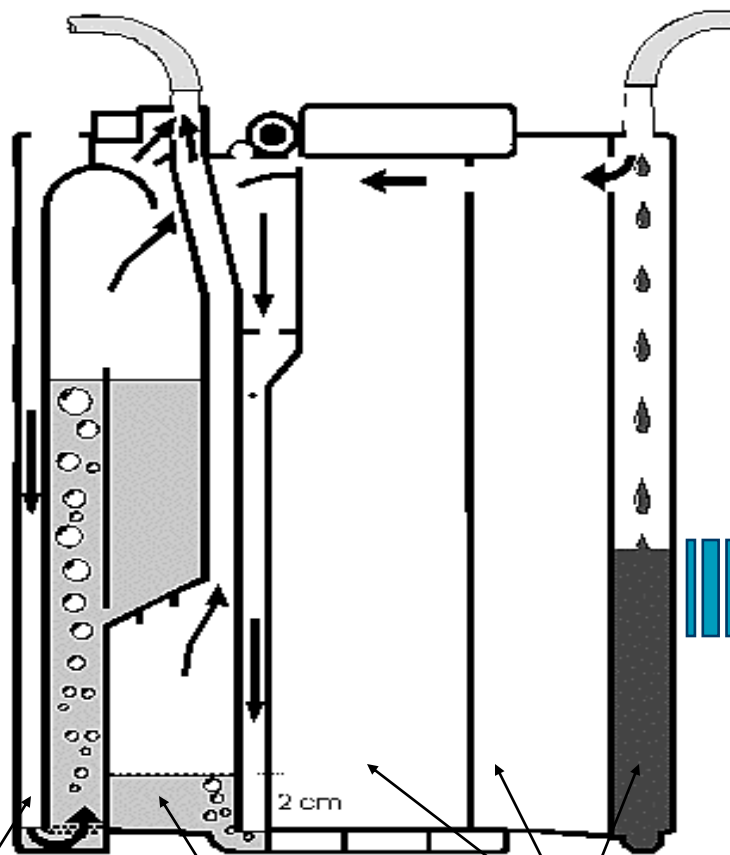
- Re-inflate lung as quickly as possible
- Re-establish visceral and parietal pleural apposition
- Reposition, upsize, add pleural catheters, as necessary
- Wall suction (-20 cm H₂O) → H₂O seal or Heimlich

- Consider sclerotherapy
- Consider endobronchial occlusion
- Consider surgical closure (VATS)

Equipment for Treatment: Box to Bedside

To suction

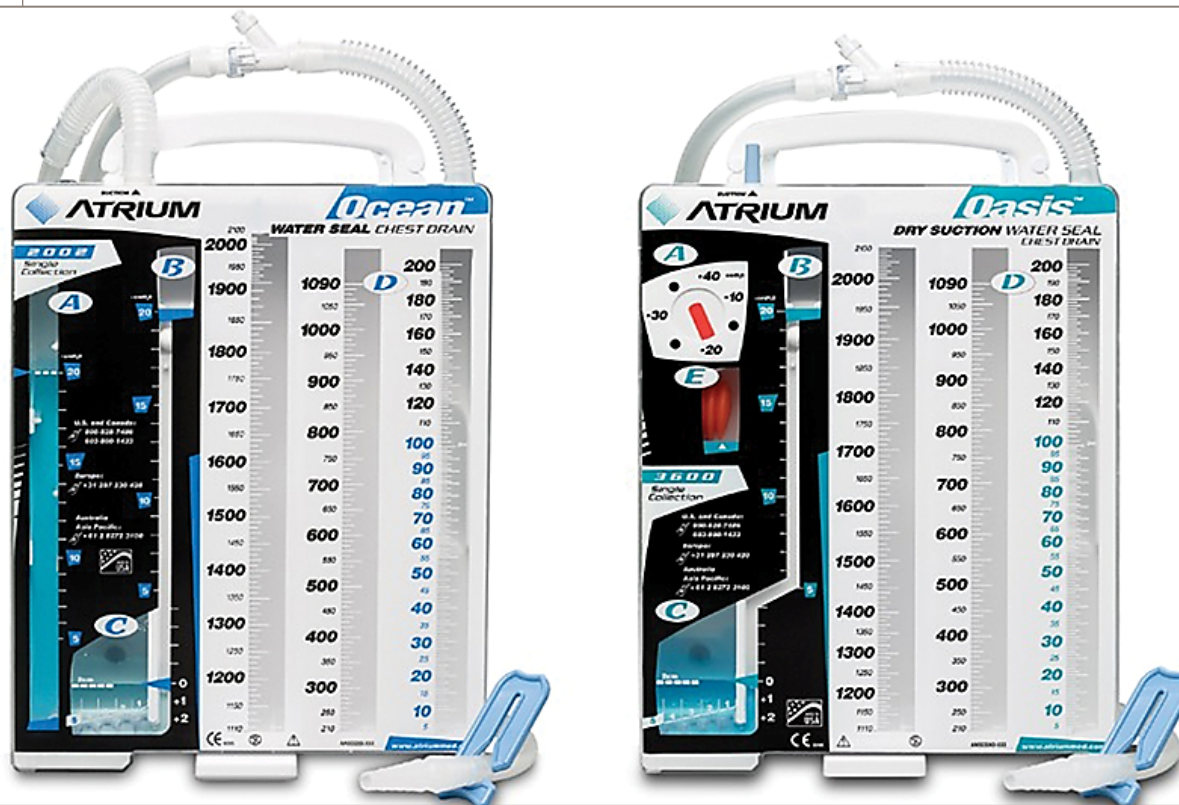
From patient



Suction control chamber

Water seal chamber

Collection chamber



Turn suction source on
Increase suction source vacuum to -80 mmHg or higher
Suction regulator is preset to -20 cmH₂O
Adjust as required