Diagnosis of pneumonia and parapneumonic effusion on chest x-ray (AP & LAT +/- decubitus)

Additional Workup:
CBC, CMP, ESR, CRP, BCx, upright CXR, chest US
Consider: Mycoplasma Titers & RVP;
sputum (expectorated, induced or via artificial airway)

<¼ hemi thorax opacified on upright CXR

Antibiotics only- follow community acquired pneumonia guidelines

Good clinical response within 24-48 hrs?

YES → Continue treatment plan

NO → **Chest ultrasound**

> ¼ hemi thorax opacified on upright CXR, and/or respiratory compromise
CONSULT SURGERY, ID, Pulmonary

Ceftriaxone +/- clindamycin or vancomycin.
Alternative for betalactam allergy: fluoroquinolone

If chest tube indicated per surgery, consult:
Consult PICU (for chest tube back up, or sedation)
Chest tube can be placed in ER, peds floor, OR, or PICU

Chest tube ± 3 doses of tPA

Good clinical response?

YES → Pediatric Surgery or PICU to remove chest tube

NO → Care team huddle for next steps

Laboratory testing on pleural fluid:
- AFB smear & culture
- Fluid cytology
- Gram stain & bacterial culture
- WBC w/ differential
- pH (on ice)
- LDH
- Glucose & protein

TPA to be instilled by team that placed chest tube (refer to TPA guidelines)

Persistent or progressive symptoms:
- Persistence of moderate to large effusion
- Ongoing or worsening respiratory compromise
- fever

- Dressing off in 48 hours
- Patient may shower
- Reapply dry gauze or band-aid if there is persistent drainage, if occurs beyond one week should contact surgery team
- Consider PICC line placement

Discharge considerations:
- Pulmonary follow up
- ID follow up
- Surgery follow up if concern for lung mass or abscess or if VATS done
- Anticipatory guidance