

**Pathway Exclusion:**

- Less than 3 months of age
- Possible aspiration pneumonia
- Prior admission within last 7 days
- History of trauma
- Chronic lung disease (excluding asthma)
- Congenital heart disease
- Sickle cell anemia
- Immunodeficiency

**Admission Criteria:**

(any of the following)

- Unable to tolerate PO
- Supplemental oxygen requirement
- IVF requirement
- Concern for moderate to severe CAP
- Failed outpatient therapy

**Effusion Size:**

- Small** - Less than 1/4 hemithorax
- Moderate** - 1/4 to 1/2 hemithorax
- Large** - Greater than 1/2 hemithorax

**\*Indications for MRSA coverage:**

- Septic shock
- Toxin-mediated disease
- Necrotizing pneumonia
- Severe complicated post-influenza pneumonia
- Critically ill/admitted to ICU

*If septic or critically ill, consider using Vancomycin.*

Parapneumonic effusion identified on chest x-ray

Obtain: CBC, CRP, blood culture, lateral decubitus x-ray  
*If flu season, obtain rapid flu.*

Assess effusion size

If immunized, begin Ampicillin  
If underimmunized, begin Ampicillin/Sulbactam or Ceftriaxone

Consult surgery for drainage  
Obtain chest US  
Begin Ceftriaxone +/- Clindamycin\*

Moderate

Obtain chest US  
Begin Ceftriaxone +/- Clindamycin\*

Is chest tube placed?

Assess for improvement

Consult ID  
Consider chest CT

Assess for improvement

Review discharge criteria

Is there respiratory distress or loculated effusion?

Move to large algorithm

Chest tube removal per surgery?

Continue IV antibiotics

Remove chest tube

Review discharge criteria

Assess for improvement

If no improvement after 48 hours of antibiotics, move to large algorithm

Review discharge criteria

If not improving after 48 hours of antibiotics, consider:

1. Repeat or additional imaging
2. Broadening antibiotics

**Discharge Criteria:**

- Stable on RA for at least 8 hours
- Downtrending fever curve
- Able to tolerate PO
- If chest tube was placed during admission, it must have been removed for > 24 hours with no evidence of fluid reaccumulation

**Discharge Antibiotics:**

- Antibiotics should be continued for a minimum of 14 days or 7 days from resolution of fever or drain removal
- If on Ampicillin, switch to Amoxicillin
- If on Ampicillin/Sulbactam or Ceftriaxone, switch to Amoxicillin/Clavulanate
- If on Vancomycin/Clindamycin and Ceftriaxone, switch to Clindamycin and Cefdinir

*\*Follow culture data if available*