UW Medicine | VALLEY MEDICAL CENTER

Pneumonia: Emergency Management

DS CRB-65

Symptom	Pts
Underlying Disease (≥1) (malignancy, heart failure, cerebrovascular, renal, or liver)	+1
SpO2 <90% PaO2 <8kPa	+1
Confusion	+1
RR ≥ 30	+1
SBP ≤ 90 OR DBP ≤ 60	+1
Age >65	+1

Suspected Pneumonia
- Infiltrates on CXR **AND**
- Clinical Symptoms

SEVERE CAP CRITERIA
(1 major or 3+ minor criteria)

Minor Criteria
- Respiratory rate>30
- PaO2/FIO2 ratio<250
- Multi-lobar infiltrates
- Confusion/disorientation
- Uremia (BUN>20 mg/dL)
- Leukopenia* (WBC 4,000)
- Thrombocytopenia
- Hypothermia (<36.8C)
- Hypotension requiring fluids

Major Criteria
- Septic shock
- Respiratory failure

CONSIDER ADMISSION?
- DS CRB-65 ≥ 2
- Respiratory distress

NO → MILD PNEUMONIA

YES → **SEVERE PNEUMONIA?**

NO → MODERATE PNEUMONIA

YES → SEVERE PNEUMONIA

MILD PNEUMONIA

TREATMENT OPTIONS

Otherwise Healthy
- Doxycycline 100 mg BID x5 days

Penicillin Allery
- Levofloxacin 750 mg daily x5 days

Co-morbidities Present
(Chronic heart, liver, lung, or renal disease, DM, immunosuppressing drugs or conditions)
- Cefuroxime 500mg BID **AND**
- Azithromycin 500mg x1day then 250 mg x4 days

DISCHARGE Criteria
- Medically Cleared

MODERATE PNEUMONIA

ADDITIONAL WORKUP
- Consider sputum cultures if concern for MRSA/Pseudomonas
  - Immunosuppression
  - Recent infection ≤3mo
  - Recent hospitalization ≤3mo
- Respiratory viral panel (in season)
- Consider bronchial hygiene assessment if concern for increased O2 demand

TREATMENT OPTIONS

Standard Treatment (5-7 days)
- Ceftriaxone 1g q24h **AND**
- Azithromycin 500mg q24h

Penicillin Allergy (5-7 days)
- Levofloxacin 750mg q24h

Acute Care Admission

SEVERE PNEUMONIA

ADDITIONAL WORKUP
- Sputum Culture (if productive)
- Respiratory viral panel (in season)
- Blood Cultures (if sepsis)
- Legionella and Pneumococcal Urinary Antigen Testing
- Consider bronchial hygiene assessment if concern for increased O2 demand

TREATMENT OPTIONS

Antibiotic Treatment (5-7 days)
- Cefepime 2g q8h **AND**
- Azithromycin 500mg q24h **AND**
- Vancomycin

Penicillin Allergy (5-7 days)
- Aztreonam 2g IV q8h **AND**
- Azithromycin 500mg q24h **AND**
- Vancomycin

Consider CCU Admission