

# CLINICAL PRACTICE GUIDELINE FOR Community-Acquired Pneumonia

## Clinical feature suggest Community-acquired pneumonia

- Acute onset (< 2 weeks)
- Clinical (3/5)
  - Fever
  - Cough ± sputum
  - Dyspnea
  - Pleuritic chest pain
  - Crepitant, consolidation
- CXR : new infiltration

**Exclusion:** last admission in hospital within 3 weeks

## Admission decision (at least 1)

1. Age > 65 yr.
2. Co-existing illness. COPD, bronchiectasis, Malignancy, DM, CRF, CHF, chronic fever disease, chronic alcohol abuse, malnutrition, CVA, Post-splenectomy, Past admission within 1 year.
3. Physical finding
  - RR > 30 /min
  - SBP < 90 mmHg, DBP < 60 mmHg
  - PR > 125 /min
  - T < 35 °C or > 40 °C
  - Alteration of consciousness
  - Evidence of extra pulmonary infection sites
4. Lab findings
  - WBC < 4,000 /mm<sup>3</sup> or > 30,000 /mm<sup>3</sup> or absolute neutrophil < 1,000 /mm<sup>3</sup>
  - SpO<sub>2</sub> (room air) < 92 %
  - Creatinine > 1.2 mg/dl or BUN > 20 mg/dl
  - CXR : Multi-lober involvement, cavitation, rapid radiographic spreading, pleural effusion
  - Hct < 30% or Hb < 9 gm%
5. Sepsis or organ dysfunction

Meet all criteria

No

Yes

Consider other Diagnosis

Community-acquired pneumonia

Admission Decision

OPD

IPD

- No cardio-pulmonary disease:
  - Clarithromycin (500 mg) 1 x 2 ○ 7 - 10 days
  - Or
  - Roxithromycin (150 mg) 1 x 2 ○ 7 - 10 days
- With cardio-pulmonary disease:
  - Oral macrolides (as above) +
  - Amoxicillin (500 mg) 2 x 2 ○ 7-10 days
  - Or
  - Augmentin (625 mg) 1 x 3 ○ 7-10 days

**Group 1. Mild to moderate (Score 1 – 2)**  
- Beta-lactam (IV) + Macrolides (IV) or Levofloxacin (IV)

**Group 2. Severe (Score 3 – 5)**

No risks for *P. aeruginosa*

1. Beta-lactam (IV) + Macrolides (IV) or Levofloxacin (IV)
2. Beta-lactam (IV) + Levofloxacin (IV)

**Group 3. Severe (Score 3 – 5)**

Risks for *P. aeruginosa*

- Antipseudomonal Beta-lactam (IV) + Antipseudomonal Fluoroquinolone (IV)

**Group 4. Risks for *B. pseudomallei***

- Ceftazidime (IV) + Cotrimoxazole (IV)

## ICU admission criteria

1 major criteria or 2 minor criteria

(1) Major criteria

- Need Ventilator
- Septic Shock

(2) Minor criteria

- SBP < 90 mmHg
- Multi-lober involvement
- SpO<sub>2</sub> < 92 % with oxygen supplement

## Indication of Sputum G/S, C/S

- ICU Admission
- Lung diseases
- Chronic alcohol users
- No response to treatment within 72 hr.
- Patients following physical or Laboratory finding in Admission Criteria

## *P. aeruginosa* risk

- Structural lung disease : Bronchiectasis
- Broad-spectrum antibiotic for 7 days within the past month
- Corticosteroid therapy (prednisolone > 10 mg/day)
- Severe malnutrition