

Optimizing Antibiotics in Pneumonia: CAP, HAP, and VAP

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Recently our ASP Team put together a great presentation on Optimizing Antibiotics on Pneumonia:

Our Objective:

- Describe the key clinical features of CAP, HAP, and VAP
- Identify the most common bacterial pathogens for each pneumonia category
- Select empiric antibiotic regimens
- Determine optimal duration of therapy and strategies for de-escalation

Case 1

A 75M presents to NGH ER with acute confusion and respiratory distress. His presentation includes:

- 2-day history of productive cough with purulent sputum, pleuritic right-sided chest pain, and dyspnea
- Vitals: temperature 38.7C, HR 112 bpm, RR 32 breaths/min, BP 90/58 mmHg (improved to 102/64 mmHg after 500 mL of IV fluid), SpO₂ 90% on 3 L/min nasal prongs
- Laboratory & Imaging:
 - Urea 8.0 mmol/L, WBC 15 x 10⁹/L, platelets 140 x 10⁹/L
 - CXR: consolidation in right middle and lower lobes
- Past History:
 - Diabetes, congestive heart failure (NYHA II)
 - No drug allergies
 - No hospitalizations, IV antibiotics, or long-term care residence in past 90 days

The prescriber calls you and asks for your recommendation for empiric antibiotic therapy. You recommend:

- a) Amoxicillin-clavulanate 875/125 mg PO BID plus doxycycline 100 mg PO BID
- b) Ceftriaxone 1 g IV daily plus azithromycin 500 mg IV daily
- c) Levofloxacin 750 mg IV daily
- d) Piperacillin-tazobactam 4.5 g IV Q6H plus azithromycin 500 mg IV daily

What is your recommendation? [Take the Quiz](#)

For more information on our successful ASP program- reach out to

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Pneumonia Search Puzzle

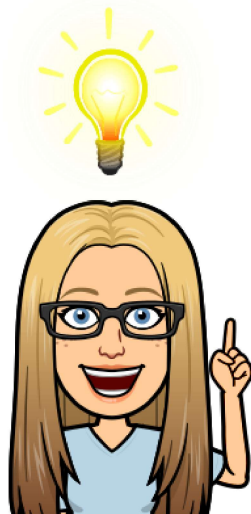
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ANTIBIOTICS
VAP
INTUBATION

PNEUMONIA
THERAPY
HOSPITALIZED

CAP
PATIENTS
CASE

HAP
COMPLICATIONS
HISTORY



Sterile Tip of the Month:

Opening a new sterile compounding facility and unsure how to address the initial certification? Make a check list of the various testing scenarios, such as testing at rest, testing in dynamic operating conditions and be sure to consider the personnel occupancies numbers, when a trainer is present, certification personnel – how many people will be permitted in the area at one time? Initial certification is also a good time to include testing the system if an unplanned or plan down time were to occur, consider testing procedures post downtime to determine the recovery time for the controlled areas.



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