

MODULE 7: Women's and Men's Health, Infections, and Hematologic Systems, Week 9 and 10 Discussion

CASE STUDY 1

HH is a 68 yo M who has been admitted to the medical ward with community-acquired pneumonia for the past 3 days. His PMH is significant for COPD, HTN, hyperlipidemia, and diabetes. He remains on empiric antibiotics, which include ceftriaxone 1 g IV qday (day 3) and azithromycin 500 mg IV qday (day 3). Since admission, his clinical status has improved, with decreased oxygen requirements. He is not tolerating a diet at this time with complaints of nausea and vomiting.

Ht: 5'8" Wt: 89 kg

Allergies: Penicillin (rash)

Results

	On admission	Day 3
Vitals		
Temp (F)	102.7	100.9
BP	138/72	136/70
HR	124	88
RR	34	20
O2 Saturation	90% (4L O2)	92% (room air)
Na (mEq/L)	144	140
K (mEq/L)	4.6	4.3
Cl (mEq/L)	103	105
HCO ₃ (mEq/L)	34	30
BUN (mg/dL)	30	18
Cr (mg/dL)	1.2	1.1
Glucose (mg/dL)	180	143
WBC (x 10 ³ cells/mm ³)	18.2	14.6
Neut	86%	83%
Bands	10%	8%
Lymph	4%	6%
Mono	0%	1%
Eos	0%	1%
Baso	0%	1%

Urine Legionella antigen: Non-reactive
 Urine Pneumococcal antigen: Non-reactive

CXR: Right lower lobe infiltrate

Blood cultures (2 sets): No growth to date x days

Bronchial alveolar lavage (BAL) culture:
 Gram-positive cocci in pairs, 34 WBCs, 3 epithelial cell

Heavy growth *Streptococcus pneumoniae*

Antibiotic	MIC	Interpretation
Penicillin	1	Susceptible
Ceftriaxone	0.25	Susceptible
Vancomycin	0.125	Susceptible
Erythromycin	>16	Resistant
Levofloxacin	≤ 0.5	Susceptible
Tetracycline	>16	Resistant