Management of Community-Acquired Pneumonia (CAP) in Non-Pregnant Adults

Reference: AM J Respir Crit Care Med; 2019; 200(7): Clinical syndrome consistent with CAP based on signs/symptoms AND infiltrate on chest radiography **Determine outpatient VS inpatient treatment based on:** Clinical judgment AND Clinical prediction rule for prognosis ■ Pneumonia Severity Index (PSI) preferred over CURB-65 More clinical pearls at pyrls.com @ 2023 Cosmas Health, Inc. and/or its affiliates. All rights reserved. **OUTPATIENT *** Assess for severity of CAP **Assess for comorbidities** Severe CAP Non-Severe CAP Chronic heart, lung, liver or renal Alcoholism Additional Diagnostic Studies Prior isolation of MRSA AND/OR Malignancy Legionella antigen testing **YES** Pseudomonas aeruginosa from the Asplenia respiratory tract within 1 year Pneumococcal urinary antigen YES NO Blood AND respiratory cultures **₩** NO prior to antibiotic therapy 🚽 Recommended empiric therapy YES Hospitalization AND exposure Amoxicillin 1 gram three times daily to IV antibiotics within 90 days OR Doxycycline 100 mg twice daily Severe CAP with risk factors Obtain blood AND for MRSA or P. aeruginosa OR respiratory cultures **₽ NO** OR Macrolide (if pneumococcal prior to Non-Severe CAP with prior resistance is <25%) antibiotic therapy respiratory tract isolation of Recommended empiric therapy for Non-Severe CAP (if not previously obtained) MRSA or P. aeruginosa **Recommended empiric therapy** Combination therapy with a beta-lactam Combination therapy of + macrolide Non-Severe CAP ONLY with OR amoxicillin/clavulanate or cephalosporin^ recent hospitalization and Type of risk factors for MRSA or Monotherapy with respiratory + macrolide IV antibiotic exposure Pseudomonas aeruginosa fluoroquinolone^t as a risk factor OR Combination therapy of $Combination \ the rapy \ with \ beta-lactam$ amoxicillin/clavulanate or cephalosporin + doxycycline (If macrolide and + doxycycline fluoroquinolone are contraindicated) $\bigcirc R$ Prior respiratory tract isolation Monotherapy with respiratory fluoroquinolone[†] Severe CAP with recent hospitalization AND ^ cefpodoxime or cefuroxime IV antibiotic exposure: Severe or Non-Severe Change therapy based on *Outpatient Treatment Strategies are for CAP with prior Vancomycin OR linezolid culture results, if needed adults with no risk factors for methicillinrespiratory isolation of Severe or Non-Severe **PLUS** Combination therapy resistant Staphylococcus aureus (MRSA) or Pseudomonas aeruginosa: CAP with prior with antipseudomonal Pseudomonas aeruginosa beta-lactam + macrolide

OR respiratory isolation Combination therapy with antipseudomonal beta-lactam + macrolide of MRSA: Risk factors include prior isolation of MRSA or Combination therapy P. aeruginosa from the respiratory tract in the OR with antipseudomonal Add vancomycin APPROPRIATE clinical response last 12 months or hospitalization AND receipt Combination therapy with beta-lactam + respiratory OR linezolid antipseudomonal beta-lactam of parental antibiotics in the last 90 days to standard CAP therapy fluoroquinolone¹ + respiratory fluoroquinolone Tolerating oral intake Normal mental status or at baseline Key Points Resolution of vital sign abnormalities (no tachycardia, no tachypnea, **CAP** severity • Obtain a MRSA nasal PCR to identify patients that hemodynamically stable. require MRSA coverage (and those that do <u>not</u>) supplemental oxygen needs improving or at baseline, afebrile) • 5 days of antibiotic therapy is recommended for Severe CAP Non-Severe CAP patients with an appropriate initial response to MRSA and Pseudomonas MRSA and Pseudomonas therapy and who are clinically stable **NOT** isolated NOT isolated • Antibiotic therapy for CAP due to Staphylococcus **⊘** APPROPRIATE clinical response aureus or Pseudomonas aeruginosa should be continued for at least 7 days in patients with an Transition to oral antibiotics and discharge Recommended therapy for appropriate initial response to therapy as soon as all clinical stability criteria is met

Note: Assess for antibiotic allergies and use alternative agents as appropriate. Suggested antibiotic doses are for normal renal function; Adjust for renal impairment when necessary. This is intended only as a guide for evidence-based decision-making.

• Testing for Legionella is recommended if indicated

• Testing for influenza is recommended if it is

prevalent in the community

by epidemiological risk factors

It is not intended to replace clinical judgment.

Severe CAP

Combination therapy with

Combination therapy with beta-lactam

+ respiratory fluoroquinolone[†]

(*If neither macrolide or fluoroquinolone can be used, doxycycline can be substituted)

Change therapy based on culture results,

if needed

beta-lactam + macrolide OR

Clinical WORSENING or INADEQUATE response

Wrong diagnosis or concomitant non-infectious disease

• Parapneumonic effusion, empyema or lung abscess

Consider the following:

Drug fever

• Nosocomial superinfection

• Exacerbation of comorbid illness