

MANAGEMENT OF COMMUNITY ACQUIRED PNEUMONIA

Including Nursing Home/Residential Home patients. [Nice 2014](#)



Suspected CAP + SEPSIS → Consider Sepsis 6 Bundle. Assess patient as below

(This guideline does not apply to patients with neutropenia or severe immunosuppression)

For Further Advice:

Contact Respiratory (9am-5pm)
Tay.respiratory@nhs.scot
 or
 Medical Team on-call (5pm-9am) via switchboard

If **Aspiration** – See [Hospital Antibiotic Adult](#)

For **common bacteria** - See [MicroGuidance](#)

For **Penicillin Allergy** (Rash AND/OR Anaphylaxis) – See [Penicillin Hypersensitivity Guidelines](#)

ASSESS SEVERITY

Evidence of consolidation on chest x-ray **PLUS:**

CORE Adverse Prognostic Features (Score 1 for each):

CONFUSION, NEW (MSQ \leq 8/10)

UREA $>$ 7mmol/l (if available)

RESPIRATORY RATE \geq 30/minute

BP $<$ 90mmHg (systolic) or \leq 60mmHg (diastolic)

65 AGE \geq 65 years

The presence of other prognostic features may increase the severity assessment in addition to the CURB65 score and must be taken into consideration.

PRE-EXISTING Adverse Prognostic Features: Co-existing chronic illness e.g. chronic bronchial sepsis/bronchiectasis

ADDITIONAL Adverse Prognostic Features: Pulse oximetry $<$ 92% or PaO₂ $<$ 8.0kPa on any FiO₂, Bilateral or multi-lobar changes on CXR (if available) or changes suggestive of empyema or cavitation, Acidosis (arterial pH $<$ 7.35),

***CLARITHROMYCIN**

Remember:

Consider risk of prolonged QT interval

Consider potential drug-drug interactions e.g. statins, warfarin, theophylline, anti-epileptics

CURB65 SCORE 0 or1 (Mild) & NO prognostic features

Consider home therapy if:

Satisfactory Social Situation
 Consider *ESDS (9am -5pm) OR Community Hospital Bed*

AMOXICILLIN 1g TDS oral

Penicillin Allergy:
 Doxycycline 200mg on day 1 then 100mg daily

CURB65 SCORE 0 or1 (Mild) WITH prognostic features

Patient remains in hospital

AMOXICILLIN 1g TDS (Oral)

Penicillin Allergy:
 Doxycycline 200mg on day 1 then 100mg daily

IF Penicillin Allergy and IV required: *Clarithromycin 500mg BD

CURB65 SCORE 2 (MODERATE)

AMOXICILLIN 1g TDS (Oral)

Consider IV if systemic involvement

PENICILLIN ALLERGY:
 Doxycycline 200mg on day 1 then 100mg daily

If penicillin allergic and IV required:
 *Clarithromycin 500mg BD

CURB65 SCORE 3 OR MORE (SEVERE)

IV CO-AMOXICLAV 1.2g TDS **PLUS**
 DOXYCYCLINE 100mg BD

HDU/ ICU:

IV CO-AMOXICLAV 1.2g TDS **PLUS**
 IV/ PO Clarithromycin 500mg BD

PENICILLIN ALLERGY:
 IV Levofloxacin 500mg BD

ALL SHOULD HAVE:

Blood culture, sputum culture, throat swab for virology PCR, and urinary legionella PCR and antigen tests

5 Days of antibiotics (IV/oral) in total (CURB65 score 0 – 2)
 Document course length of antibiotics on TPAR

5 Days of antibiotics (IV/oral) in total (CURB65 score 3 or more) if patient clinically stable
 Document course length on TPAR

AT DISCHARGE

- Smoking cessation advice
- Chest X-ray at 6/52 if risk of lung cancer (e.g. smokers and/or age $>$ 50y) – **arranged in hospital**

FOLLOW-UP

- Consider further investigation for persistent symptoms/signs
- GP to ORGANISE FOLLOW-UP ARRANGEMENTS**
- Influenza/pneumococcal vaccination for those $>$ 65 years or with chronic illness
- Smoking cessation advice

IF NOT IMPROVING: RE-ASSESS SEVERITY, ANTIBIOTICS, OXYGENATION and IV FLUIDS. Repeat CXR (empyema), SPUTUM CULTURE and consider investigations for mycobacteria spp including TB. Discuss with Respiratory Team.

CONSIDER IV to ORAL SWITCH IF:

- Oral/GI route available
- Temperature $<$ 38°C for 24h
- SaO₂/PaO₂ \geq 92%/8.0kPa (air)
- Pulse $<$ 100/minute
- RR $<$ 30/minute
- BP \geq 90/60 mmHg

IVOST ALL MILD/MODERATE CAP (CURB 65 score 0-2) patients to:
 Oral Amoxicillin 1g TDS Or
 Oral Doxycycline 100mg once daily if penicillin allergic
Total IV/Oral Duration 5 days

IVOST ALL SEVERE CAP patients to:
 Oral Doxycycline 100mg BD Or
 Oral Co-trimoxazole 960mg BD
Total IV/Oral Duration 5 days

CONSIDER DISCHARGE 24-HOURS AFTER SWITCH TO ORAL THERAPY