Government of South Australia
Central Northern Adelaide
Health Service

ROYAL ADELAIDE HOSPITAL

Guidelines for the Management of Hospital Acquired Pneumonia

Not for immunosuppressed or ventilated patients

Definition: pneumonia that is not incubating upon admission, and differs in causative micro-organisms from community acquired pneumonia. In general, patients developing pneumonia (as defined in Therapeutic guidelines, Antibiotic) after 48 hours of admission qualify as hospital acquired (nosocomial) infections.

Initial Investigations*:*

- Urgent CXR, electrolyte, urea, creatinine, glucose, LFTs, CBE & differential, SaO_2, and arterial blood gas (if $SaO_2 < 94\%$)
- **Prior to the initiation of antibiotic therapy, specimens should be sent for identification of causative organism.**
  - Blood cultures
  - Sputum Gram stain and culture including Legionella
  - Nasopharyngeal aspirate/swab in viral transport medium or sputum for rapid viral detection
- The following specimens should also be obtained
  - Urinary Legionella antigen detection

Mild to Moderate

amoxycillin + clavulanic acid 875/125 mg (1 tablet) orally 12 hourly

Or

cephazolin 1 g IV 8 hourly **plus** Gentamicin* 5 mg/kg/day IV
Due to risks of ototoxicity and nephrotoxicity, it is recommended that gentamicin should be **ceased** after 3 days unless strongly indicated

If CrCl < 30 mL/min use ceftriaxone 1 g IV daily

Add metronidazole 500 mg IV 12 hourly if suspect aspiration or recent thoraco-abdominal surgery

For patients with a history of anaphylaxis to penicillin and/or who have an allergy to cephalosporins consult Infectious Diseases or Clinical Microbiology

Alternative therapy needs discussion with Infectious Diseases or Clinical Microbiology

Response to treatment should be assessed at 48-72 hours after initiation of therapy

Severe

Seek advice from Infectious Diseases or Clinical Microbiology in all cases

Preferred regimen piperacillin/tazobactam (Tazocin®) 4.5 g IV 8 hourly **plus** Gentamicin* 5 mg/kg/day IV

(Piperacillin/tazobactam (Tazocin®) requires approval from Infectious Diseases or Clinical Microbiology)

In patients known to be colonised with, or at high risk of MRSA, vancomycin should be added.

***Consult the once daily aminoglycoside chart for dosing and monitoring.**

Approved by the Antibiotic Working Party of the RAH Drug Committee September 2005, December 2005, May 2009