Haematology Neutropenic Sepsis Guidance



Neutropenic sepsis = sepsis plus neutrophil count <0.5 or <1 if chemotherapy within past 21days

- Assess patient with possible neutropenic sepsis within 15 minutes of presentation to hospital and commence resuscitation following "Sepsis 6" care bundle
- Assume they are neutropenic if they have received chemotherapy within the past 3 weeks
- Assess severity of sepsis and assign to risk category as detailed below
- Penicillin/beta-lactam Allergy confirm type and severity of previous reaction e.g. rash, anaphylaxis
- If patient has had chemotherapy within the past 3 weeks and has temperature ≥38°C or <36°C or clinical evidence of significant sepsis (SIRS≥2) <u>initiate antibiotic therapy within 1 hour do not wait for the blood results to come back. Always take blood cultures before giving antibiotics but do not wait for full infection screen to be performed</u>
- When blood results are available switch to Hospital Antibiotic Adult protocol f above definition of neutropenic sepsis not fulfilled
- All patients should have a full infection screen Blood cultures (Hickman line and peripheral venous) Stool culture MSU Sputum culture Chest X-ray Swab skin lesions and Hickman line exit site Throat swab bacterial and viral
- Review previous microbiology results for resistance

STANDARD RISK PATIENTS

Neutropenia + <u>Sepsis</u> + NEWS Score ≤6

START ANTIBIOTIC THERAPY WITHIN 1 HOUR Piperacillin/Tazobactam No routine gentamicin

Penicillin Allergy: Teicoplanin + Aztreonam

If history of anaphylaxis or angioedema:

Teicoplanin + Ciprofloxacin[△]

Meropenem IV 1g tds

400mg od (if >80kg 6mg/kg)

Teicoplanin – 400mg bd for 3 doses then

Vancomycin – follow local dosing guidance

^ΔIf receiving ciprofloxacin prophylaxis – consider

Teicoplanin + Gentamicin* or discuss options with Micro

HIGH RISK PATIENTS

Neutropenia + Septic Shock or NEWS ≥7 or Acute leukaemia or Allogeneic Transplant

START ANTIBIOTIC THERAPY WITHIN 1 HOUR
Piperacillin/Tazobactam + Gentamicin* (see below)

Penicillin Allergy:

Teicoplanin + Aztreonam + Gentamicin* (see below)

If anaphylaxis or angioedema:

Teicoplanin + Ciprofloxacin + Gentamicin* (see below)

Standard dose – 7mg/kg follow guidance

(consider reduced dose 5mg/kg)

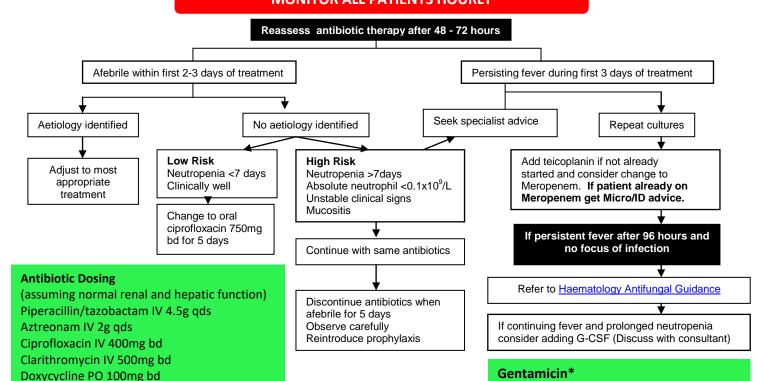
Myeloma patients – discuss with SpR/Cons

eGFR <30ml/min - discuss with SpR/Cons

Add Antimicrobial cover for specific additional infection risks:

- Previous or current MRSA infection/colonisation, suspected line infection Teicoplanin
 - o Teicoplanin resistant organism isolated previously Vancomycin
- Community acquired pneumonia suspected (consider bronchoscopy) Clarithromycin/Doxycycline
- Previous ESBL infection of known ESBL carrier, in place of piperacillin/tazobactam Meropenem

MONITOR ALL PATIENTS HOURLY



AMG/Haematology: July 2012

Local expert opinion

Ref: SAPG guidance 2016

Updated: Feb 2017

Review: Feb 2019