Antibiotikavalg ved neutropeni

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Solstrand 25.10.16

Akuttveileder i pediatri

- **Antibiotikavalg ved feber uten kjent infeksjonsfokus hos pasienter med nøytropeni**
- A. Standard empirisk kombinasjonsregime: **Ampicillin og gentamicin** (eller tobramycin)
- B. Alternativ empirisk regime: Hvis pasienten nylig har fått nefrotoksiske medikamenter (cisplatin/carboplatin eller ifosfamid), gis monoterapi med et 3. generasjons cefalosporin (**cefotaksim/ceftriaxon eller ceftazidim**).

- **Dersom ingen objektiv bedring i pasientens tilstand/vedvarende febril etter 3 døgn**
- Ta først nye blodkulturer i tillegg til grundig diagnostikk/utredning (se tidligere). Videre behandling må deretter individualiseres etter pasientens kliniske tilstand. Mulige alternativer kan være **3. generasjons cefalosporin, piperacillin/tazobactam eller meropenem**

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SPECIAL ARTICLE

Guideline for the Management of Fever and Neutropenia in Children With Cancer and/or Undergoing Hematopoietic Stem-Cell Transplantation

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Question

What empiric antibiotics are appropriate for children with high-risk FN?

Recommendations

Use **monotherapy** with an **antipseudomonal β-lactam or a carbapenem** as empiric therapy in pediatric high-risk FN (1A; strong recommendation, high-quality evidence). Reserve addition of a second Gram-negative agent or glycopeptide for patients who are clinically unstable, when a resistant infection is suspected, or for centers with a high rate of resistant pathogens (1B; strong recommendation, moderate-quality evidence).

Febrile neutropenia in AML is a medical emergency

Goal to start iv therapy within 30 minutes in septic patients else in 60 minutes*

Fever ≥ 38,5 once or sustained ≥ 38 one hour
Don't wait for neutrophil results in high-risk patients

Vital parameters
SpO_2, blood pressure, respiratory rate, heart rate, capillary refill
Blood count, electrolytes, creatinine, inflammatory parameter, lactate
Cultures blood, urine (no delay)
In septic patients blood gas, tests for DIC, liver function
consider need of fluid bolus (20 ml/kg) immediately

Broad-spectrum antibiotics
Very careful monitoring the first 4-6 hours

* Fletcher M et al Prompt administration of antibiotics is associated with improved outcomes in febrile neutropenia in children. Ped Blood & Cancer 2013 60:1299

Choice of first antibiotic

- Antipseudomonal ß-lactam (APP) or meropenem as monotherapy* (Lehrnbecher et al JCO 2012) (1A)**

- Meronem 20 mg/kg q4 (max dose 1g)
  OR
- Piperacillin/tazobactam most commonly used APP
  Dose Pip/Taz 80 (-100) mg/kg q4 (max dose 4g/dose)

- Cefepime and ceftazidime inferior***

- Never use older generation cephalosporins

Hva slags antibiotika skal en stakkars kliniker velge?