Evidence review: prevention and management of neutropenic sepsis in cancer patients

Ammann 2003

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Clinical features and settings	Paediatric cancer patients (<18 years) with neutropenia (ANC <500/mm³ or <1000/mm³ and falling) and fever (≥39.0°C or ≥38.5°C for ≥2 hours) after non-myeloablative chemotherapy.
Participants	285 FN episodes in 111 children. Median age at the first FN episode was 6.3 years. Proportion with haematological cancers was not reported. The rate of severe bacterial infection was 106/285 (37%).
Study design	Retrospective observational study. Consecutive sample. Switzerland
Target condition and reference standard(s)	Severe (significant) bacterial infection: defined as bacteraemia, positive urine culture, pneumonia, clinically unequivocal diagnosis of infection, serum CRP >150 mg/L or unexpected death from infection.
Index and comparator tests	Study does not report when tests were done, although the aim was to find predictive factors for use within the first 2 hours of fulfilment of the febrile neutropenia criteria.
	Haemoglobin level: thresholds > 71 g/L and >100 g/L
	ANC: thresholds >0.11 X 10 ⁹ /L and >0.5 X 10 ⁹ /L
	AMC: thresholds >0.11 X 10 ⁹ /L and >0.5 X 10 ⁹ /L
	Phagocyte count: thresholds >0.11 X 10 ⁹ /L and >0.5 X 10 ⁹ /L
	Thrombocyte count: thresholds >11 X 10 ⁹ /L and >150 X 10 ⁹ /L
	Serum CRP: thresholds >5 mg/l and > 50 mg/l (5mg/l defined as normal)

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	Serum creatinine: thresholds >75 mg/L
Follow-up	Not reported.
Notes	Serum CRP incorporated into reference standard.