The Children's Hospital at Montefiore

Febrile Neutropenia Pathway

Diagnosis of Febrile Neutropenia:
Neutropenia: ANC < 500 cells/m3 or expected decrease to <500 cells/m3 during the next 48 hours AND **Fever:** temperature >38

Labs: CBC with diff, CMP, Blood cultures
Obtain 2 blood cultures at time of fever and with each subsequent fever.
Include 1 anaerobic culture bottle if concerned for anaerobic process
Use central line for blood cultures when possible
Other studies as clinically indicated: e.g. CXR, respiratory pathogen panel, stool studies, UA (no catheter specimens)

Perform complete physical exam but do NOT perform rectal exam

Empiric antibiotics:
First line: Cefepime
If concerned for intra-abdominal process: Piperacillin-tazobactam
If concerned for cefepime-resistant organism: Meropenem
Severe beta-lactam allergy: consult Infectious Diseases
Concern for central nervous system infection: consult Infectious Diseases

Additional antibiotics:
When clinically indicated, consider addition of an agent to cover resistant gram-positive bacteria (e.g. MRSA, coagulase-negative staphylococcus, enterococcus).
Options may include: Daptomycin, Ceftaroline, and Vancomycin

ADMINISTER ANTIBIOTICS WITHIN 1 HOUR OF PRESENTATION: DO NOT DELAY ANTIBIOTICS WHILE WAITING FOR LAB RESULTS

IV fluid bolus(es) if indicated

Re-evaluation at 48 hours of empiric therapy

Positive culture obtained or source identified?

YES

Consult Infectious Diseases to determine appropriate definitive treatment course

NO

If previously started, consider discontinuation of extended grampositivecoverage (e.g. daptomycin / vancomycin / cefaroline),even if patient remains febrile
Continue other agent(s) and close clinical assessment
Consider ID consult

Patient afebrile before 5 days

YES

Source identified?

YES

NO

Continue empiric antibiotics until ANC >200 and rising AND patient afebrile AND well-appearing

NO

Patient remains febrile for 5 days or more*:
Initiate empiric antifungal treatment
Call Infectious diseases to decide best choice, appropriate infection workup and if formal consult needed

*Also applies if fever resolves and then recurs while on antibiotics for 5 continuous days