EmergencyKT: Malignancy with Systemic Inflammatory Response Criteria

For patients at high risk for neutropenic fever or chemotherapy associated fever.

Goal time to empiric antibiotic administration: <2 hours from arrival.

Solid Organ Malignancy

BMT / Hematogenous Malignancy (Box 1)

Active Chemo within 14 Days?

Yes

No

Yes

No

Documented Fever >100.4° F OR 2/4 SIRS criteria with or without indwelling catheter (Box 2)

Labs / Diagnostics
- CBC with diff, Ep1
- BCTx (Peripheral + CVC)
- UA/UCTX
- CXR (PA / Lat)
- VBG / Lactate
- Other cultures as clinically indicated

ANC <1000?

Yes

No

Yes

No

Start Empiric Antibiotics
Use ED Neutropenic Fever Order Set (Box 4)

1. Cefepime 2g IV or Meropenem 500mg-1g IV
   - Administer 1st prior to other antibiotics
   - Infuse cefepime over 30 minutes
   - Consult Pharmacy if severe PCN allergy

2. Consider addition of Vancomycin 15mg/kg if clinically indicated (Box 3)
   - Administer 30 minutes after Cefepime
   - Consult Pharmacy if Vancomycin allergy

Place bed request: Oncology or BMT as indicated. 8th floor preferred

Start empiric gram negative coverage with Cefepime 2g IV or Meropenem 500mg-1g IV

Treat symptomatically. Consider alternate source of fever.

Discuss disposition with Heme/Onc Fellow on call. Consider outpatient management.

Yes

No

BMT/Hematogenous Malignancy

Treat symptomatically. Consider alternate source of fever.

Yes

No

Solid Organ Malignancy
Hematogenous Malignancy
- Leukemia
  - ALL, AML, CLL, CML
- Lymphoma
  - Hodgkins, Non-Hodgkins
- Multiple Myeloma
- Myelodysplastic Syndrome

SIRS Criteria (2 of 4)
- Temp > 100.4°F or < 96.8°F
- HR > 90 BPM
- RR > 20 or PaCO₂ < 32
- WBC > 12, < 4, or > 10% bands

Indications for Vancomycin Administration
- Clinically apparent serious catheter related infection
- Blood culture positive for gram positive bacteremia
- Known colonization with PCN / Cephalosporin resistant pneumococci or MRSA
- Hypotension or septic shock
- Soft tissue infection
- Pneumonia

ED Neutropenic Order Set Includes:
- Antibiotic orders mapped directly to ED-Pyxis for rapid administration.
- CBC with diff, Ep1, LFT, VBG, Lactate
- BCTx (peripheral + CVC)
- UA/UCTX
- CXR (PA/Lat)
- Other cultures as clinically indicated:
  - Sputum CTx, Cdiff, Influenza, Thrush
  - IVF