**Fournier’s Gangrene Guidelines**

**Definition:** A variant of necrotizing soft tissue infection that involves the scrotum and penis or vulva.

**Isolation Requirement**
- Contact isolation AND droplet precautions is required for 24 hours after the first dose of broad spectrum antibiotics. After 24 hours of contact and droplet precautions, both can be discontinued as long as the patient does not grow a pathogen that requires isolation per VUMC guidelines.

**Antimicrobial Therapy**

- **Empiric Therapy**
  - Preferred Regimen:
    - Vancomycin (+)
    - Clindamycin (+)
    - Piperacillin/Tazobactam*

  - OR

- **Narrow Therapy**
  - Streptococcus Pyogenes (Group A Strep)
  - Clostridium species
  - Staph Aureus
  - Polymicrobial without Pseudomonas or Staph Aureus

- **Definitive Therapy**
  - Penicillin G** (unless severe allergy)
  - MSSA: Cefazolin
  - MRSA: Vancomycin
  - Ampicillin/Sulbactam Or Ceftriaxone (+) metronidazole

- *Consider Cefepime as an alternative option

- **Labs/Cultures**
  - Peripheral blood cultures x 2 on presentation
  - Operative tissue cultures
  - Daily CBC and CRP
  - Hemoglobin A1c

- **Infectious Disease Consult**
  - The infectious disease service should be consulted for any of the following criteria
    - Bacteremia
    - Multidrug resistant pathogens
- Debridement with osteoarticular involvement (bone or exposed bone)
- Consult required per VUMC policy (e.g. *Staph Aureus* bacteremia)

**Antibiotic Duration**
Systemic antibiotics in soft tissue infections should be continued until the following criteria are met:

1. Source control has been obtained
2. Patient is hemodynamically stable
3. Fever has been absent for 48 hours
4. White blood cell count has improved
5. CRP down trending

**Glucose Management**

**Blood Glucose Target**
- 110-150 mg/dL

**Insulin Therapy**
- Initiate insulin therapy if blood glucose is ≥150mg/dL or the patient has diabetes
- Consider initiating an insulin infusion for ≥ 2 blood glucoses > 200 mg/dl (requires admission to an ICU)

**Endocrinology Consult**
- Consider consulting endocrinology/glucose management service for the following
  - Hemoglobin A1c > 6.5 to assist with inpatient control and outpatient follow-up
  - Transitioning off the insulin infusion

**Dosing Guidance**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Creatinine Clearance (ml/min)</th>
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<tbody>
<tr>
<td></td>
<td>&gt;80</td>
</tr>
<tr>
<td>Ampicillin/Sulbactam</td>
<td>3000mg q6h</td>
</tr>
<tr>
<td>Cefazolin</td>
<td>2000mg Q8h</td>
</tr>
<tr>
<td>Cefepime</td>
<td>2000mg Q8h</td>
</tr>
<tr>
<td>Ceftriaxone</td>
<td>2000mg Q24h</td>
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<tr>
<td>Clindamycin</td>
<td>900mg Q8h</td>
</tr>
<tr>
<td>Meropenem</td>
<td>1000mg Q8h</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>500mg Q8h</td>
</tr>
<tr>
<td>Penicillin G</td>
<td>4 million units Q4h</td>
</tr>
<tr>
<td>Piperacillin/Tazobactam</td>
<td>3.375mg Q8h</td>
</tr>
</tbody>
</table>

**References**


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