ANMC Adult Inpatient Skin and Soft Tissue Infection

Complicating Risk Factors

- Infected diabetic or vascular ulcer
- Critical illness
- Concern for necrotizing fasciitis
- Deep tissue infection
- Surgical site infection
- Injection drug use
- Human or animal bite
- Bacteremia
- Periorbital or orbital cellulitis
- Perineal/vulvar/perianal infection
- Pregnancy

If complicating risk factors are present, treatment varies. Consider ID consultation.

Diagnostic Studies

- Blood cultures if systemically ill, diabetic or other immunosuppression
- Plain film only if concern for foreign body or necrotizing fasciitis
- Wound culture of purulent drainage
- **NOT** routinely indicated for initial management of uncomplicated disease:
  - ESR, CRP, Procalcitonin
  - Blood cultures
  - Wound swab/Superficial cultures, fungal or AFB cultures
  - Plain films, CT or MRI

Treatment Options

	Empiric Antibiotic Therapy	Oral Antibiotic Step-down Therapy	Duration
Uncomplicated Skin and Soft Tissue Infections			
Non-purulent cellulitis Common Pathogens: *Beta-hemolytic Streptococci sp.*	• **Cefazolin 2 gm IV q8hr** • **Ibuprofen 600 mg PO TID*** Beta-Lactam Allergy: • **Clindamycin 600 mg IV q8hr^** • **Ibuprofen 600 mg PO TID***	• **Cephalexin 1 gm PO TID** Beta-Lactam Allergy: • **Clindamycin 300 mg PO TID**	5 days • 5 days is sufficient for well-drained abscess without surrounding cellulitis • Duration of therapy may be extended for severe or poorly responsive disease
Cutaneous abscess or Purulent cellulitis Common Pathogens: *Staphylococcus aureus*	• I&D (send purulent drainage for culture) • **Vancomycin 1 gm IV q12hr** (pharmacy to dose)	Based on susceptibilities (pick one): • **TMP/SMX DS 1 tab PO BID** • **Clindamycin 300 mg PO TID** • **Doxycycline 100 mg PO BID**	
Complicated Skin and Soft Tissue Infections			
Human bite/Animal bite Common Pathogens: *Pasteurella sp* (cats, dogs), *Capnocytophaga spp.* (dogs), *Eikenella corrodens* (human), *Strep spp,* Anaerobes	• **Ampicillin/Sulbactam 3gm IV q6hr** Beta-Lactam Allergy: • **Levofloxacin 750 mg IV/PO q24hr PLUS** • **Clindamycin 600 mg IV q8hr**	• **Amoxicillin/Clav 875/125 mg PO BID** Beta-Lactam Allergy: • **Levofloxacin 750 mg PO q24hr PLUS** • **Clindamycin 300 mg PO TID**	Prophylaxis with open wound: 3 to 5 days Infected: 7 to 14 days
Necrotizing Fasciitis (including Fournier's Gangrene)# Common Pathogens: GAS, *Clostridium perfringens*, MRSA, *Vibrio vulnificus, Klebsiella spp.*	• Prompt surgical consultation • Consider ID consultation • **Vancomycin IV 20 mg/kg x1** (Pharmacy to dose) **PLUS** • **Cefepime 1 gm IV q8hr (extended infusion) PLUS** • **Clindamycin 900 mg IV q8hr**	To be determined by ID Physician based on organism identification	7+ days depending on clinical resolution
Surgical Site Infection Common Pathogens: Dependent on site of infection	• I&D (send tissue/drainage for culture and gram stain) ○ Antimicrobial therapy to be determined by gram stain from I&D and location of surgical site infection	To be determined based on organism identification	

* If no contraindication to NSAID therapy

^ In diabetic non-purulent cellulitis, consider replacing Clindamycin with Vancomycin therapy for empiric *Staphylococcus aureus* coverage.

LRINEC scoring can be used to assist in diagnosis of necrotizing fasciitis

Antibiotics with broad-spectrum gram-negative activity are NOT recommended except necrotizing fasciitis, and in most cases should be avoided.

Antimicrobial Stewardship Program Approved 2018

Stevens DL, et al. Practice Guidelines for the Diagnosis and Management of SSTI: 2014 Update by IDSA. *CID*. 2014; 59(2):e10-e52.