Sharp Healthcare Treatment Guidelines for Skin & Soft Tissue Infections

Take-Home Points

1) Most skin infections are caused by Staph and Strep
   - **Anaerobic and gram negative coverage (i.e. Zosyn, ceftriaxone or levo/cipro) is NOT needed in most cases**
2) Treatment duration is 5 days with clinical response
   - Defined as **20% reduction in erythema and resolution of SIRS/sepsis**
   - Treating until complete resolution of erythema is NOT necessary in most cases
3) Diabetics do not require broader or longer treatment for cellulitis, abscess, or wound infection (*Exception: severe foot infection)*

Adjunctive treatment for cellulitis

1) Elevation to reduce edema
2) For non-diabetic patients and no other contraindications, consider adjunctive anti-inflammatory tx
   a. Ibuprofen 400mg q6h or prednisone 20mg daily for 5 days

Indication	Inpatient Therapy	Transition to Outpatient Therapy	Total Duration
Non-Purulent Cellulitis	Cefazolin 2g IV q8h	Cephalexin 1000mg TID (QID if>80 kg) **OR** Dicloxacillin 500mg QID	5 days
	Cefazolin allergy: Vancomycin IV. Step down to Clindamycin 450mg PO TID		
Purulent Cellulitis, Abscess, or Penetrating trauma	**Incision and drainage** Vancomycin IV	Doxycycline 100mg PO BID **OR** Bactrim DS 1 tab PO BID (>80kg, 2 DS tab PO BID)	5 days after drainage or debridement
	For ED, ±cephalexin 1000mg TID (QID if >80kg) at discharge if strep suspected		
Wound Infection (non GI/GU)	**Open and debride wound** Vancomycin IV	*Non-MRSA*: treat same as non-purulent cellulitis *MRSA*: treat same as purulent cellulitis/abscess	
Bite Infections Prophylaxis	*Prophylaxis indicated for: Immunocompromised or asplenic, advanced liver disease, edema at wound, mod-severe injuries, wound to hand, face, or penetration of periosteum/joint capsule* Augmentin 875/125mg PO BID *(PCN allergy:* Cefuroxime 500mg PO BID + Metronidazole 500mg TID **OR** Doxycycline 100mg PO BID + Metronidazole 500mg TID)		3-5 days
Treatment of infected wounds	*Consider debridement as indicated* Initial/Empiric therapy: Unasyn 3g IV q6h *(PCN allergy:* Ceftriaxone 2g IV q24h + Metronidazole PO/IV q8h) See above for empiric step-down options		7-14 days
Diabetic w/ uncomplicated skin infection	*Treat same as cellulitis or abscess described above. Diabetics with uncomplicated infections do not require gram negative or anaerobic coverage in most cases*		
Diabetic w/ mild or moderate foot infection	*Treat same as wound infection. Diabetics with mild to moderate foot infections do not need anaerobic or gram-negative abx in most cases* ***Extensive, chronic moderate infections:*** *consider adding Metronidazole 500mg PO/IV q8h to Vancomycin or Cefazolin,* ***OR*** *switch to Unasyn 3g IV q6h*		Mild: 7 days Mod: 14 days
Diabetic foot infection – deep space or sepsis	*Rule out osteomyelitis. Consider ID and podiatry consults.* Vancomycin IV + Zosyn 4.5g IV q8h	Abx and duration of therapy based on cultures and degree of infection.	
	PCN allergy: Vancomycin IV + Cefepime 2g IV q8h + Metronidazole 500mg IV q8h		
Necrotizing fasciitis	**Immediate surgical eval for I&D:** Vancomycin IV + Clindamycin 900mg IV q8h + Zosyn 4.5g IV q8h		
	PCN allergy: Replace Zosyn w/ Cefepime 2g IV q8h		

- Not intended for complicated infections including, but not limited to, neutropenia (ANC <500), organ/stem cell transplant, prednisone use >10mg/day, AIDS, or recent receipt of chemotherapy. Use clinical judgement.

References
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Lipsky BA et al. 2012 Infectious Diseases Society of America clinical practice guideline for the diagnosis and treatment of diabetic foot infections. Clin Infect Dis. 2012; 54(12): 132-173