Alia's Antibiotic Series

Skin and Soft Tissue Infections
Purulent, Abscesses

Mild
Purulent infection
Not a re-occurence
NO systemic signs of infection

Moderate
Purulent infection
Systemic signs of infection
- temp >38 degrees
- tachycardia >90 bpm
- tachypnea >24 breaths per minute
- leukocytes >12, <4, or >10% bands

Medical co-morbidities complicating healing (liver/renal disease, vascular insufficiency)

Severe
Purulent infection with systemic signs of infection
- temp >38 degrees
- tachycardia >90 bpm
- tachypnea >24 breaths per minute
- leukocytes >12, <4, or >10% bands

Clinical signs of deeper infection
- bullae, skin sloughing, hypotension, end organ dysfunction, complicated or deep abscesses

Failure on PO antibiotics previously
Neutropenia
On chemotherapy
Immunocompromised or immunodeficiency
Malignancy
Immersion injury (susceptible to pseudomonas)
Recurrence after I&D with antibiotics

Mild Infection: I&D with no antibiotics

Moderate Infection: I&D with PO antibiotics

Consider Streptococcus A,B,C, G and Staphylococcus (MSSA, HA-MRSA, and CA-MRSA)

Treatment duration 5-7 days

Empiric Therapy
TMP/SMX 1-2 DS tablets PO BID
Doxycycline 100mg PO BID

Severe Infection: I&D with IV antibiotics

Consider Streptococcus A,B,C, G and Staphylococcus (MSSA, HA-MRSA, and CA-MRSA), Pseudomonas

Treatment duration varies, reassess and step down to PO

Empiric Therapy
Vancomycin 30mg/kg/day in 2 divided doses IV
Daptomycin 4mg/kg q 24hours IV
Linezolid 600mg q12h IV or 600mg PO BID

MRSA Risk Factors

Hospital Acquired-MRSA
- Hospitalization
- Long-term care
- Recent antibiotic therapy
- Hemodialysis

Community Acquired-MRSA**
- HIV infection
- Men who have sex with men
- Injection drug use
- Unsanitary/cramped living conditions
- Incarceration
- Military service
- Sharing sports equipment
- Diabetes

**Avoid Clindamycin if suspected CA-MRSA due to inducible resistance*

DISCLAIMER: *Always refer to your local antibiograms to guide your choices for clinical care. Susceptibility of various organisms may vary due to local resistance patterns.*

References
1. Levine, B. (2008). EMRA antibiotic guide. Irving, TX (1125 Executive Cir., Irving 75038-2522): EMRA.
2. MSH+UHN Antimicrobial Stewardship,. (2014). Skin and Soft Tissue Infections. Toronto. Retrieved from http://www.antimicrobialstewardship.com/sites/default/files/asp_simple_messaging_--_skin_and_skin_structure_infections.pdf
3. Stevens, D., Bisno, A., Chambers, H., Dellinger, E., Goldstein, E., & Gorbach, S. et al. (2014). Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. Clinical Infectious Diseases, 59(2), e10-e52. doi: 10.1093/cid/ciu296
4. Baddour, L. Uptodate.com. (2014). Cellulitis and erysipelas. Retrieved 28 December 2014, from http://www.uptodate.com/contents/cellulitis-and-erysipelas

Alia's Antibiotic Series

Skin and Soft Tissue Infections
Non-purulent

BoringEM

Mild
Typical, localized cellulitis
No purulent focus

Moderate
Typical cellulitis with systemic signs of infection
- temp >38 degrees
- tachycardia >90 bpm
- tachypnea >24 breaths per minute
- leukocytes >12, <4, or >10% bands

Medical co-morbidities complicating healing
(liver/renal disease, vascular insufficiency)

Severe
Purulent infection with systemic signs of infection
- temp >38 degrees
- tachycardia >90 bpm
- tachypnea >24 breaths per minute
- leukocytes >12, <4, or >10% bands

Clinical signs of deeper infection
- bullae, skin sloughing, hypotension, end organ dysfunction, complicated or deeb abscesses

Patients who have failed previous PO antibiotics
Neutropenia
On chemotherapy
Immunocompromised or immunodeficiency
Malignancy
Immersion injury (susceptible to pseudomonas)
Recurrence after I&D with antibiotics

Mild Infection: PO antibiotics

Consider Strep A, B, C, G

Treatment duration 5 days, extend if no clinical improvement

Empiric therapy:
Cephalexin 500mg PO QID
Dicloxacillin 500mg PO QID

If penicillin allergic:
Clindamycin 300mg QID
Levofloxacin 750mg PO daily

Moderate Infection: IV antibiotics

Consider Strep A, B, C, G, MSSA

Treatment duration minimum 5 days, extended if no clinical improvement

Empiric therapy:
Ceftriaxone 1gm IV q8 hours
Cefazolin 1gm IV q8 hours

If penicillin allergic:
Clindamycin 600-900mg IV q8 hours

If known MRSA colonization (from previous infection, or nasal swabs):
TMP/SMX 1-2 DS tablets PO BID

Severe Infection: IV antibiotics, r/o necrotizing disease

Consider Strep A, B, C, G, MSSA, MRSA, Pseudomonas

Treatment duration varies, reassess, await culture results, and step down to PO

Empiric therapy:
Vancomycin 30mg/kg IV divided into 2 doses AND
Piperacillin/Tazobactam 3.375mg IV q6hours

If penicillin allergic:
Vancomycin 30mg/kg IV divided into 2 doses AND
Imipenem 1g IV q6-8hours
Vancomycin 30mg/kg IV divided into 2 doses AND
Meropenem 1g IV q8hours

If concerns for necrotizing disease:
Stat surgical consult
Piperacillin/Tazobactam 4.5mg IV and Clindamycin 600-900 mg IV

DISCLAIMER: *Always refer to your local antibiograms to guide your choices for clinical care. Susceptibility of various organisms may vary due to local resistance patterns.*

References
1. Levine, B. (2008). EMRA antibiotic guide. Irving, TX (1125 Executive Cir., Irving 75038-2522): EMRA.
2. MSH+UHN Antimicrobial Stewardship,. (2014). Skin and Soft Tissue Infections. Toronto. Retrieved from http://www.antimicrobialstewardship.com/sites/default/files/asp_simple_messaging_--_skin_and_skin_structure_infections.pdf
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4. Baddour, L. Uptodate.com. (2014). Cellulitis and erysipelas. Retrieved 28 December 2014, from http://www.uptodate.com/contents/cellulitis-and-erysipelas