Skin and Soft Tissue Infection (ED)

Evidence Based Outcome Center

EXCLUSION CRITERIA

- Necrotizing fasciitis
- Immunocompromised
- Sepsis
- Postoperative wound infection
- Animal bite
- Osteomyelitis
- Septic arthritis
- Perianal/perirectal cellulitis/abscess
- Periorbital/orbital cellulitis
- Breast abscess
- Pilonidal abscess
- Dental abscess
- Deep neck infection
- Cervical lymphadenitis
- Chronic or recurrent cellulitis/abscess at same site
- Pressure ulcer

INCLUSION CRITERIA

All children > 59 days of age with suspected skin and soft tissue infection

History and Physical

Suspected deeper infection (at fascia or deeper) → Manage off Pathway

Note for symptoms of redness, warmth, and tenderness

History of Purulence?

- No → Cellulitis (non-purulent) → Antibiotic Recommendations
- No → Cellulitis w/potential fluctuance → Consider Ultrasound → Drainable collection?
  - No → Antibiotic Recommendations
  - Yes → Drainage procedure
- Yes → Definite Abscess → Drainage procedure

See Picture Atlas to distinguish between Cellulitis vs Normal Inflammation associated with an abscess

Antibiotic Recommendations

- 1 Admit* Manage on Inpatient SSTI Pathway
- Discharge** Discharge Instructions

Drainage procedure

- Discharge** Discharge Instructions
- 1 Admit* Manage on Inpatient SSTI Pathway

INPATIENT ADMISSION CONSIDERATIONS

- Systemic symptoms
  - ill-appearing, hemodynamic instability, significant fever
  - concern for Sepsis
- Rapidly expanding or large lesion (>3 cm; significant cellulitis after abscess drainage)
- Age <2 months
- Concern for inadequate drainage of large abscess
- Abscess location that requires subspecialty consult
- Unable to tolerate oral antibiotics
- Significant pain
- Failed OP treatment with appropriate antibiotics, no improvement
- Follow-up concerns

1

* Review admissions considerations (Use clinical judgment to admit or discharge)

** Follow-up – Patient should have scheduled follow-up in 48-72 hours.

★ Consider ultrasound only in cases of indeterminate clinical assessment for abscess.

dell children's Ascension

Last Updated: March 9, 2021

Skin and Soft Tissue Infection (Inpatient)

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INPATIENT ADMISSION CONSIDERATIONS

- Systemic symptoms
  ill-appearing, hemodynamic instability, significant fever concern for Sepsis
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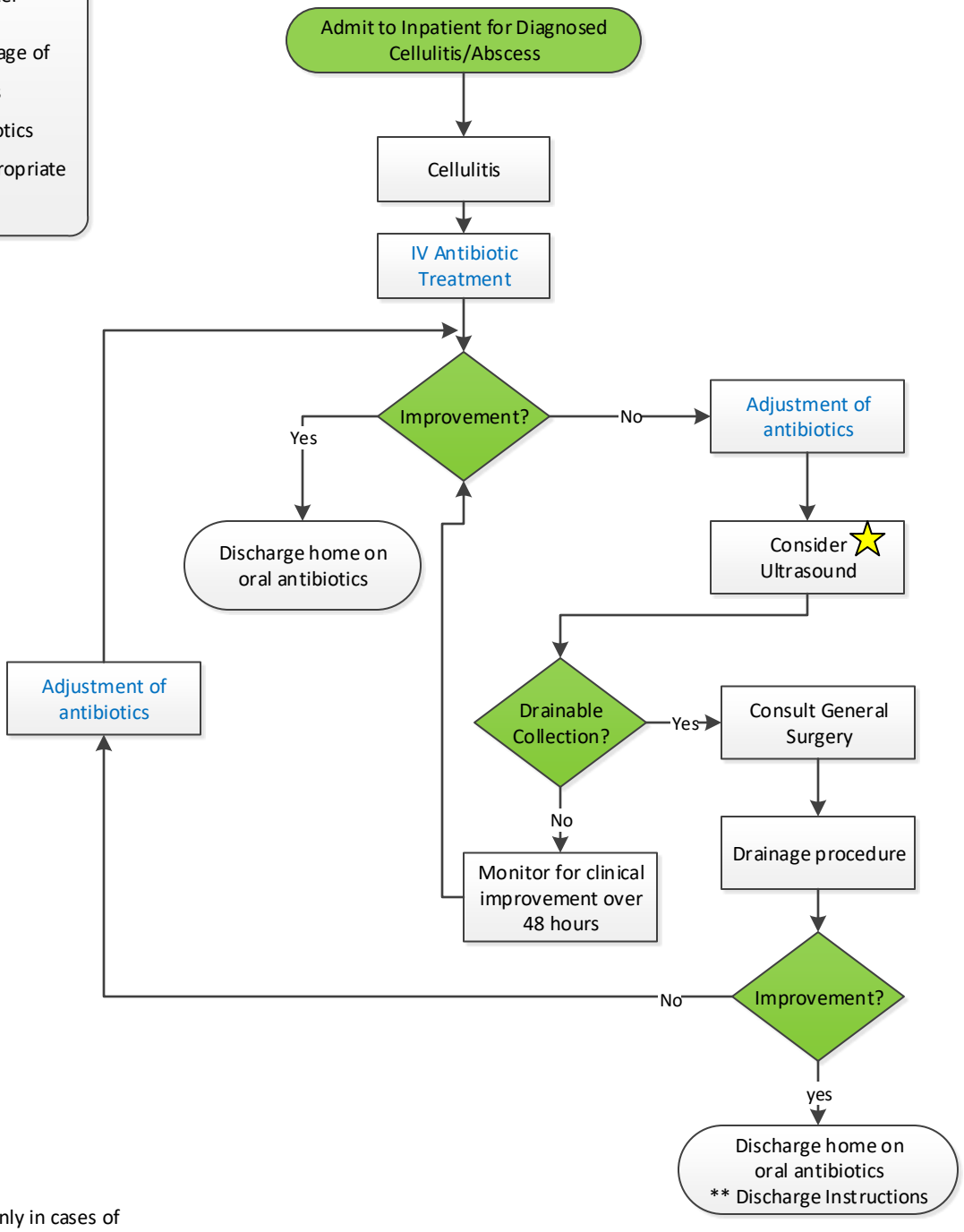

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Skin and Soft Tissue Infection
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History

- Fever, other systemic symptoms
- Number and location of abcess(es)
- Druation of lesion
- Rapidity of spread
- Previous history of pustule, abscess, folliculitis
- Family history or abscess, MRSA
- Break in skin barrier
  - Abrasion
  - Insect bite
  - Dermatologic condition
- Concern for possible foreign body
- Infection due to animal bite
- Previous antibiotic use, including topical antibiotics
- Previous home remedies

Physical Exam

- Assess Vital Signs, pain
- Location, size of lesion (measure, outline, photograph)
- Induration, swelling, fluctuance, erythema, ulceration, eschar, or lymphangitic streaking
- Spontaneous drainage
- Overlying or surrounding cellulitis
- Regional adenopathy
- Rash or existing skin condition

Picture Atlas:

Abcess with surrounding inflamation

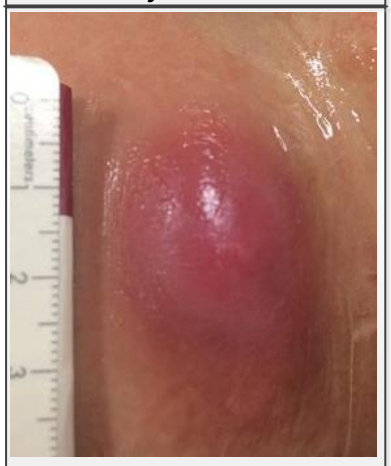


Photo courtesy of Mayo Foundation for Medical Education and Research

Cellulitis (Non-purulent)

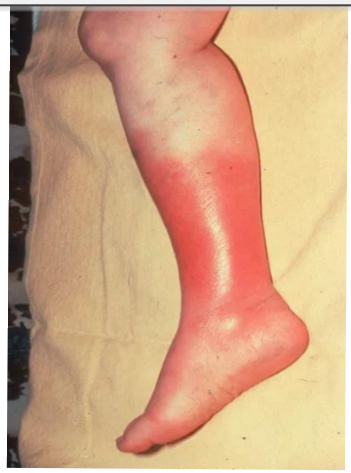


Photo courtesy of Coreem.net/skin and soft tissue infection

Abscess with Papule w/ surrounding Inflammation

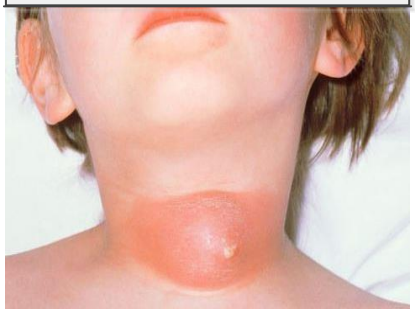
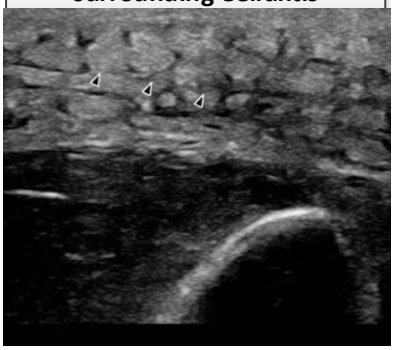


Photo courtesy of Texas https://www.dhyogada.com /ent-medicine/ent-head-neck/neck-abscesses/. of Public Health

Ultrasound abscess with surrounding Cellulitis



https://www.coreem.net/core/cellulitis

Ultrasound

- Findings consistent with cellulitis
  - Tissue edema
  - "Cobblestoning"
- Helpful in differentiating cellulitis from abscess

Addendum 1: Guideline for SSTI Antibiotic Selection and Dosing

Disposition	Medication	Dosing Regimen
Non-Purulent Cellulitis: First-Line^		
Sepsis/SIRS	Refer to Sepsis ED/Inpatient guideline for antimicrobial recommendations	
Inpatient	Cefazolin (IV)	33 mg/kg/dose IV q8h (max 1000 mg/dose)
Outpatient	Cephalexin (PO)	25 mg/kg/dose PO q8h (max 1000 mg/dose)
Non-Purulent Cellulitis: History of Type I reaction or SEVERE adverse reaction to Cefazolin		
Inpatient	Vancomycin (IV)	See Vancomycin Dosing Guideline
Outpatient	Clindamycin (PO)	10 mg/kg/dose PO q8h (max 450 mg/dose PO)
Purulent Cellulitis: First-Line		
Sepsis/SIRS	Refer to Sepsis ED/Inpatient guideline for antimicrobial recommendations	
Inpatient without systemic signs of infection	Clindamycin (IV)	13 mg/kg/dose IV q8h (max 600 mg/dose)
	SMX/TMP* (PO)	5 mg/kg/dose of TMP* PO q12h (max 320 mg of TMP/dose)
Outpatient	SMX/TMP* (PO)	5 mg/kg/dose of TMP* PO q12h (max 320 mg of TMP/dose)
Outpatient (If MSSA)	Cephalexin (PO)	25 mg/kg/dose PO q8h (max 1000 mg/dose)
Purulent Cellulitis: History of Type I reaction or SEVERE adverse reaction to Sulfa		
Inpatient (If MRSA susceptible to clindamycin)	Clindamycin (IV)	13 mg/kg/dose IV q8h (max 600 mg/dose)
Inpatient	Vancomycin (IV)	See Vancomycin Dosing Guideline
Outpatient	Doxycycline (PO) *≥8 years only*	2 mg/kg/dose PO q12h(max 100 mg/dose)
Outpatient (If MRSA susceptible to clindamycin)	Clindamycin (PO)	10 mg/kg/dose PO q8h (max 450 mg/dose PO)
Outpatient (If MSSA)	Cephalexin (PO)	25 mg/kg/dose PO q8h (max 1000 mg/dose)

*SMX/TMP: sulfamethoxazole/trimethoprim

^ SMX/TMP recommended if personal or family history of MRSA; Avoid using SMX/TMP if abscess has not been drained

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Approved by the Pediatric Evidence-Based Outcomes Center Team

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