

## Care and Treatment Plan: Cellulitis – Adult and Pediatric

### Definition

An acute, diffuse, spreading skin infection involving the deeper layers of the skin and subcutaneous tissue.

Registered Nurses with **Remote Nursing** Certified Practice designation (RN(C)) are authorized to manage, diagnose, and treat adults with cellulitis and children with non-facial cellulitis who are **2 years of age and older**.

### Management and Intervention

*Note:* Do not underestimate cellulitis. It can spread very quickly and may progress rapidly to necrotizing fasciitis. It should be treated aggressively and monitored on an ongoing basis.

### Goals of Treatment

- Resolve infection
- Identify formation of abscess
- Check tetanus prophylaxis

### Non-pharmacologic Interventions

- Apply warm or cool saline compresses to affected areas QID for 15 minutes for comfort
- Mark border of erythema with pen to monitor spread of inflammation
- Elevate, rest, and gently splint the affected limb

### Pharmacologic Interventions: Adult

#### Analgesics

- Acetaminophen 325mg 1-2 tabs PO q4-6h PRN, or
- Ibuprofen 200mg 1-2 tabs PO q 4-6h PRN

#### Antibiotics

*Oral antibiotics if MRSA not suspected:*

- Cloxacillin 500mg PO QID for 5-7days, or
- Cephalexin 500mg PO QID for 5-7 days

*Clients with penicillin and cephalosporin allergy (e.g., cephalexin)*

- Clindamycin 300mg PO QID for 5-7 days

*Clients with known MRSA: Adult*

- Trimethoprim 160mg/sulfamethoxazole 800mg (DS) 1 tab PO BID for 5-7 days, or
- Doxycycline 100mg PO BID for 5-7 days

### Pharmacologic Interventions: Pediatric

#### Analgesics

- Acetaminophen 10-15mg/kg/dose PO q4-6 hours PRN. Do not exceed 75mg/kg in 24 hours, from all acetaminophen sources, or
- Ibuprofen 5-10mg/kg/dose PO 4-6 hours PRN. Do not exceed 40mg/kg in 24 hours.

### Antibiotics

- Cephalexin 25-50mg/kg/day PO divided QID for 5-7 days, or
- Cloxacillin 50mg/kg per day PO divided QID for 5-7 days

*Clients with penicillin and cephalosporin allergy (e.g., cephalexin)*

- Clindamycin 25-30mg/kg/day PO divided TID for 5-7 days

*Clients with known MRSA or purulent cellulitis*

- Trimethoprim-sulfamethoxazole 8-12mg/kg/day PO (dosing is based on trimethoprim component) divided BID for 5-7 days

### Pregnant Women

- Acetaminophen, cloxacillin, cephalexin may be used.
- DO NOT USE trimethoprim-sulfamethoxazole or ibuprofen.

### Breastfeeding Women

- Ibuprofen can be used in breast feeding after consultation with physician or nurse practitioner.
- DO NOT USE trimethoprim/sulfamethoxazole or doxycycline.

### Potential Complications

- Extension of infection
- Abscess formation
- Sepsis
- Necrotising fasciitis
- Recurrent cellulitis

### Client Education and Discharge Information

- Advise on condition, timeline of treatment and expected course of disease process.
- Counsel client about appropriate use of medications (dose, frequency, compliance).
- Encourage proper hygiene of all skin wounds to prevent future infection.
- Stress importance of close follow-up.
- If shaving is the cause, educate the client about shaving with the hair growth.

### Monitoring and Follow-up

- Follow-up daily until resolving to ensure that infection is controlled.
- Instruct client to return for reassessment immediately if lesion becomes fluctuant, if pain increases, or if low grade or high fever develops.

### Consultation and/or Referral

Consult with or refer to a physician or nurse practitioner if:

- New symptoms present or progression of disease is rapid
- No improvement after 48 hours of antibiotics
- Client is diabetic and/or immunocompromised
- Pain is out of proportion to the clinical findings



- Cellulitis is over or involves a joint
- Any facial cellulitis

### Documentation

As per agency policy.

## References

More recent editions of any of the items in the References List may have been published since this DST was published. If you have a newer version, please use it.

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