

## Frequently asked Questions

### **What is the appropriate duration of therapy for cellulitis?**

The appropriate duration of therapy for cellulitis is not entirely known. We do know that—in mild-to-moderate cases—there is no difference between patients treated with 5 or 10 days of levofloxacin and re-evaluated at 5 days into therapy. For most patients, 7 days suffices. Clinical experience suggests that some patients—particularly those with obesity and/or lymphedema—might require higher doses of more prolonged therapy; this is unsupported in the literature.

### **Why is oral cloxacillin not recommended?**

Oral cloxacillin was not recommended as first or second line therapy because of its pharmacokinetics. It is poorly absorbed orally (50% of the dose is absorbed) and food reduces its absorption. It must be taken on an empty stomach (one hour before a meal or two hours after). This makes it very difficult for patients to be compliant with a drug that needs to be taken every six hours.

### **Why cephalexin is recommended first line for cellulitis when levofloxacin is less expensive and is dose only once a day?**

Cephalexin is recommended as first line therapy for cellulitis as it has a narrower spectrum of activity. Quinolones have an unnecessarily broad Gram-negative spectrum of activity and have been associated with the emergence of the NAP-1 strain of *Clostridium difficile*.

Quinolones are a second line option when patients cannot tolerate beta-lactam antibiotics.

### **What are the dosing recommendations for obese (BMI > 30) patients?**

There are no guidelines for dosing obese patients with cellulitis. However, there is some evidence to support the need for higher doses of cephalosporins in surgical prophylaxis to prevent surgical site infections in obese patients. In order to achieve high tissue concentrations of antibiotics, some patients may require intravenous therapy as tolerable oral doses will not be sufficient to achieve the required tissue concentrations.

### **When should a patient receive intravenous therapy?**

Intravenous therapy should only be considered when a patient has an underlying medical condition which predisposes them to worse outcomes (DM, immunosuppression, etc), if they have extensive cellulitis or if they are systemically unwell (fever, hypotensive, etc) or have a BMI > 30 and require hospitalization. Most patients who are well enough to go home do not require intravenous therapy.

### **What is the rate of community acquired MRSA skin infections in Toronto and Ontario?**

The prevalence of MRSA in purulent SSTI's is highly variable across Canada, and changing. Preliminary data from the latest surveillance study on community-acquired MRSA purulent skin and skin structure infections in Canada shows an overall incidence of community-acquired MRSA from purulent skin and skin structure infections to be approximately 18%. This is based on data collected between June and December 2012 from across Canada including several Toronto hospitals.

### **Should treatment regimens for cellulitis include coverage for acquired MRSA ?**

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No, cellulitis is most commonly caused by streptococcal infections. Community acquired MRSA is not an important consideration in non-purulent cellulitis.

**What is the occurrence of Group A Streptococcal skin infections?**

80-90% of cases with cellulitis and erysipelas are due to Group A streptococcal infection. The majority of the remaining cases are due to other beta-hemolytic streptococci (e.g. Groups B and C) and *S. aureus*. Gram negatives are a decidedly uncommon cause of microbiologically proved cases of cellulitis and/or erysipelas.