

Cellulitis (not perineum)

Choice of antimicrobial regimen for patients presenting with cellulitis

Previous microbiology results should be checked to exclude relevant resistances. Macrolide resistance rates of approximately 20% and 10% exist in local isolates of *Staphylococcus aureus* and *Streptococcus pyogenes* (group A *Streptococcus*) respectively. MRSA carriage will affect antibiotic choice

For diabetic foot infections please refer to separate guideline.

If a history of unusual exposure, consider discussion with Microbiology.

Class		1 st line	2 nd line / penicillin allergy	Comment
I	Patients have cellulitis or other skin and soft tissue infection and no signs of systemic toxicity and no recorded significant co-morbidity (peripheral vascular disease, chronic venous insufficiency or morbid obesity), no sepsis	Flucloxacillin 500mg to 1g 6 hourly PO	Clarithromycin 500mg 12 hourly PO Consider vancomycin IV (according to dosing guidelines) or doxycycline 100mg 12 hourly PO if poor response.	May be possible to manage on outpatient basis with oral antimicrobials
II	Patients with co-morbidity such as peripheral vascular disease, chronic venous insufficiency or morbid obesity, which may complicate or delay resolution of their infection but no sepsis (i.e. SIRS<2)	Flucloxacillin 2g 6 hourly IV	Clarithromycin 500mg 12 hourly IV Consider vancomycin IV (according to dosing guidelines) if poor response	May be possible to manage with short term hospitalisation or ambulatory IV antimicrobials
III	Patients have cellulitis or other skin and soft tissue infection and i) sepsis (i.e. SIRS>=2) or ii) new confusion or iii) a limb-threatening infection due to vascular compromise	Flucloxacillin 2g 6 hourly IV	Vancomycin IV (according to dosing guidelines)	Require admission until infected area is clinically improving, systemic signs of infection are resolving and co-morbidities stabilised Refer to critical care outreach team Discuss with microbiology
IV	Patients have cellulitis or other skin and soft tissue infection and severe sepsis (sepsis plus dysfunction of one or more organs i.e. elevated lactate, oliguria, hypotension), septic shock (sepsis induced hypotension despite adequate fluid resuscitation) or suspected necrotising fasciitis.	Flucloxacillin 2g 6 hourly IV + Ciprofloxacin 400mg 12 hourly IV ¹ + Clindamycin 600mg to 1.2g 6 hourly IV	Vancomycin (according to dosing guideline) + Ciprofloxacin 400mg 12 hourly IV ¹ + Clindamycin 600mg to 1.2g 6 hourly IV	Require admission until infected area is clinically improving, systemic signs of infection are resolving and co-morbidities stabilised Refer to critical care outreach team Urgent surgical referral if necrotising fasciitis suspected Discuss with microbiology
Abdominal wall cellulitis	Patients with abdominal wall cellulitis thought likely to originate from underlying GI pathology	Amoxicillin 1g 8 hourly IV + Ciprofloxacin 400mg 12 hourly IV ¹ + Metronidazole 500mg 8 hourly IV	Vancomycin (according to dosing guideline) + Ciprofloxacin 400mg 12 hourly IV ¹ + Metronidazole 500mg 8 hourly IV	Require admission until infected area is clinically improving, systemic signs of infection are resolving and co-morbidities stabilised Refer to critical care outreach team Urgent surgical referral if necrotising fasciitis suspected Discuss with microbiology

¹. IV for first dose, then review if appropriate to switch patient to oral.

MRSA - if patient is known to be colonised with MRSA use vancomycin IV (according to dosing guideline) to maintain trough level 15 – 20 mg/l and discuss with microbiologist. Doxycycline (100 mg 12 hourly PO) may be appropriate for class I infections if organism is sensitive.

Length of treatment – 7 to 14 days usually with appropriate IV to oral switch (see guideline). Longer courses may be required.

Microbiological samples – blood cultures should be taken for patients with class II and above. Swabs should be sent from broken, exuding or ulcerated areas. Throat swab may be sent from patients with necrotising fasciitis. MRSA screening should be carried out as per policy.

Above guidance includes intravenous drug users.

If cellulitis is associated with lymphoedema, refer to NHS Borders Guideline.