

Skin and Soft Tissue Infections (Adults)

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Introduction and Purpose

Antimicrobial Guidelines are intended to provide clinicians guidance on the management (both treatment and prevention) of common infections. This guideline forms part of a series of antimicrobial guidelines.

The clinical guidelines provide evidence based and best practice on the management of patients with infective episodes. They include empirical antimicrobial therapy including dose, route and duration of therapy and where necessary microbiological investigations and

Objectives

- To improve the quality of antimicrobial prescribing and reduce inappropriate prescribing.
- To maximise the clinically effectiveness of antimicrobial agents used.
- To reduce drug related toxicity and development of antimicrobial resistance.
- To ensure cost effective use of antimicrobial agents.

Scope

This guideline applies to all healthcare professionals involved in the prescription, administration and monitoring of antimicrobial agents.

Development and consultation

The clinical guidelines have been produced by the lead clinician and lead pharmacist for each division in conjunction with microbiology.

Implementation and Monitoring and documentation

Implementation and adherence to the guidelines is the responsibility of the lead clinician and lead pharmacist for each division.

Key aspects of the guidelines will be monitored as part of the annual audit programme.

ULCERS

Skin ulcers are often colonised by mixed organisms and usually require nothing more than cleaning with sodium chloride 0.9%. Antibiotics are only indicated if there is evidence of clinical cellulitis, increased pain or exudate, enlarging ulcer or pyrexia. Avoid the use of topical antibiotics, antiseptics and disinfectants.

LACERATIONS

Antibiotic therapy should be offered if laceration is at high risk of infection (contaminated with soil, faeces, saliva or pus) or is infected.

The patients' immunisation status should be checked and a booster dose of tetanus vaccine given accordingly. Those with tetanus prone wounds which are at high risk of contamination should be given human tetanus immunoglobulin regardless of tetanus immunisation history, in line with DoH, Green Book advice. Refer to Tetanus immunisation schedules for further information.

Clean laceration (no history or evidence of contamination or foreign bodies)	<u>Flucloxacillin</u> 500mg PO 6 hourly for 7 days
Contaminated laceration (high risk material e.g. soil, faeces, saliva, purulent exudates)	<u>Co-amoxiclav</u> 625mg PO 8 hourly for 7 days
Penicillin allergy	<u>Clindamycin</u> 300mg PO 6 hourly for 7 days

IMPETIGO

Systematic review indicates topical and oral treatment produces similar results. Topical antibiotics should be reserved for localised lesions as there is increasing resistance.

1st choice	<u>Flucloxacillin</u> 500mg PO 6 hourly for 7 days
Penicillin allergy	<u>Clarithromycin</u> 500mg PO 12 hourly for 7 days

HUMAN / ANIMAL BITES

Tetanus immunisation status should be checked and vaccination given if appropriate - see Tetanus immunisation schedules sheet for further information.

1st choice	<u>Co-amoxiclav</u> 625mg PO 8 hourly for 7 days
Penicillin allergy	<u>Metronidazole</u> 400mg PO 8 hourly plus <u>Doxycycline</u> 100mg PO 12 hourly or <u>Clarithromycin</u> 500mg PO 12 hourly for 7 days

CELLULITIS

	1st choice	Penicillin allergy
CLASS 1 Systemically well and no co-morbidity*	<u>Flucloxacillin</u> 500mg PO 6 hourly for 7 days	<u>Clindamycin</u> 300mg PO 6 hourly for 7 days
CLASS 2 Systemically unwell or systemically well with co-morbidity*	<u>Flucloxacillin</u> 1g PO 6 hourly for 7 days OR <u>Flucloxacillin</u> 1g IV 6 hourly if oral route compromised	<u>Clindamycin</u> 450mg PO 6 hourly for 7 days OR <u>Clindamycin</u> 600mg IV 6 hourly if oral route compromised 6 h
CLASS 3 Significant systemic upset or unstable co-morbidity* or limb threatening infection	<u>Benzylpenicillin</u> 1.2g IV 6 hourly plus <u>Flucloxacillin</u> 2g IV 6 hourly <i>Switch to PO after 48 hours if appropriate:</i> <u>Flucloxacillin</u> 500mg PO 6 hourly Total duration: 10 – 14 days	<u>Clindamycin</u> 600mg PO 6 hourly (unlicensed dose) OR <u>Clindamycin</u> 600mg IV 6 hourly if oral route compromised. Switch to oral when medically stable. Total duration: 10 – 14 days
CLASS 4 Sepsis syndrome or severe life threatening infection Discuss all cases with microbiology	<u>Benzylpenicillin</u> 2.4g IV 2 - 4 hourly plus <u>Ciprofloxacin</u> 400mg IV 12 hourly plus <u>Clindamycin</u> 600mg IV 6 hourly	<u>Ciprofloxacin</u> 400mg IV 12 hourly plus <u>Clindamycin</u> 600mg IV 6 hourly

* Co-morbidity includes: peripheral vascular disease, chronic venous insufficiency or morbid obesity

If groin involvement or crepitant cellulitis or abscess	Treat as CLASS 2 but ADD Metronidazole 400mg PO 8 hourly (or 500mg IV 8 hourly if oral route compromised). <i>Metronidazole not needed if on clindamycin</i>
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	1st choice	Penicillin allergy
Facial / periorbital cellulitis	<u>Co-amoxiclav</u> 625mg PO 8 hourly for 7 – 10 days	<u>Clindamycin</u> 300mg PO 6 hourly for 7-10 days
If facial cellulitis secondary to superficial abrasion on face distal to the mouth	<u>Flucloxacillin</u> 500mg – 1 g PO 6 hourly for 7 - 10 days	<u>Clindamycin</u> 300mg PO 6 hourly for 7-10 days

NECROTISING FASCIITIS

Discuss **all** cases with Microbiology. Urgent **Surgical debridement is essential.**

1st choice	<u>Benzylpenicillin</u> 2.4g IV 2 - 4 hourly plus <u>Ciprofloxacin</u> 400mg IV 12 hourly plus <u>Clindamycin</u> 600mg IV 6 hourly
Penicillin allergy	<u>Ciprofloxacin</u> 400mg IV 12 hourly plus <u>Clindamycin</u> 600mg IV 6 hourly

CELLULITIS IN LYMPHODEMA

In lymphoedema, cellulitis attacks are variable in presentation and are different from classical cellulitis. Most episodes are believed to be caused by Group A Streptococci. Prompt treatment is essential to avoid further damage to the affected part, which in turn may predispose to repeated attacks.

	st 1 st choice	Penicillin allergy
Acute cellulitis and septicaemia	<u>Amoxicillin</u> 2g IV 8 hourly plus <u>Gentamicin</u> 7mg/kg IV 24 hourly <i>Switch to oral once stable:</i> <u>Amoxicillin</u> 500mg PO 8 hourly Total duration: 14 days	<u>Clindamycin</u> 600mg IV 6 hourly <i>Switch to oral once stable:</i> <u>Clindamycin</u> 300mg PO 6 hourly Total duration: 14 days
Prophylaxis to prevent recurrent cellulitis (if ≥ 2 attacks per annum)	<u>Penicillin V</u> 500mg PO 24 hourly (1g if >75kg) After 1 year, halve dose to 250mg PO 24 hourly (500mg if >75kg)	<u>Clarithromycin</u> 250mg PO 24 hourly

GAS GANGRENE

Discuss **all** cases with Microbiology. Urgent **Surgical debridement is essential.**

st 1 st choice	<u>Benzylpenicillin</u> 2.4 g IV 6 hourly plus <u>Metronidazole</u> 500 mg IV 8 hourly
Penicillin allergy	Discuss with Microbiology

RINGWORM (*Tinea*)

Topical agent	<u>Clotrimazole</u> 1% cream for 2 weeks or longer (see BNF for doses)
Oral agents	<u>Griseofulvin</u> or <u>Terbinafine</u> (see BNF for doses) Duration: usually for 6 weeks depending on site of infection.

REFERENCES

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5. Consensus document on management of cellulitis in lymphodema. British Lymphology Society, February 2007