Wound infection post amputation - Antibiotic Guideline

Reference no.:CG-CLIN/1366/24

Amputations can be classified as follows:

Clean - Amputations where the limb is ischaemic, or where dry gangrene is present. There is no need to continue antibiotics post op if there is no residual osteomyelitis.

Contaminated – Amputations through or adjacent to an area of acute inflammation (without pus or ulceration). If all infected tissue has been removed by amputation and there is no wound infection or osteomyelitis then antibiotics should be continued for a maximum of 48hrs post-op.

Dirty – Amputations adjacent to or through necrotic ulcers and/or purulent areas. If all infected tissue has been removed by amputation and there is no wound infection or osteomyelitis then antibiotics should be continued for a maximum of 48hrs post op.

What samples to send?

Send samples from amputation site for culture & sensitivity.
NB; Samples should be sent from the resection margin (bone/tissue) at surgery and not the amputated parts.

If there is osteomyelitis or wound infection remaining and microbiology culture results are available from the site prior to amputation, then antibiotics may be started based on the results until culture and sensitivity results are available from the amputation site.

Empirical treatment if no previous results are available

- This antibiotic section includes fluoroquinolone usage.
- The Medicines and Healthcare products Regulatory Agency (MHRA) - with input from the Commission on Human Medicines (CHM) - have reviewed and published drug safety updates regarding systemic fluoroquinolones.
- Ciprofloxacin is hyperlinked to the British National Formulary.
- For NHS medicines and MHRA information for healthcare professionals on ciprofloxacin, click here and here, respectively.
- For MHRA printable information for patients on fluoroquinolones, click here.

No penicillin allergy and MRSA negative	**Penicillin allergy – non immediate reaction without systemic involvement and MRSA negative**	**Penicillin allergy immediate, rapidly evolving reaction, or non immediate reaction with systemic involvement OR MRSA positive**
Co-amoxiclav IV 1.2g 8 hourly **or** co-amoxiclav PO 625mg 8 hourly	Cefuroxime IV 1.5g 8 hourly **plus** metronidazole IV 500mg 8 hourly For oral options, discuss with a consultant microbiologist.	IV Vancomycin or IV teicoplanin dosed according to hospital guidelines **plus** ciprofloxacin 400mg 12 hourly IV or 500mg PO 12 hourly **plus** metronidazole IV 500mg 8 hourly **or** 400mg PO 8 hourly.

Note that these guidelines assume normal renal and hepatic function. The doses of many antibiotics should be reduced in renal or hepatic impairment. They may also not be suitable for use in pregnancy. Please discuss this with a pharmacist

		In patients unsuitable for ciprofloxacin, instead use aztreonam IV 1G tds (with vancomycin or teicoplanin, PLUS metronidazole). For oral options, discuss with a consultant microbiologist.

Review culture and sensitivity results at 48hr and adjust treatment accordingly

Duration

- Superficial infections: 5-7 days
- Deep or organ/space infections: 10 - 14 days or longer if osteomyelitis (please refer to the osteomyelitis guideline)

Document control

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