

PLASTIC SURGERY DEPARTMENT
PROPHYLACTIC ANTIBIOTIC GUIDELINES

INDICATIONS:

1. Operations involving free grafting of any tissue other than skin, e.g. tendon, bone, cartilage, fascia, nerve. (Regimen 1)
2. Operations where prostheses or implants are inserted, excluding breast. (Regimen 1)
3. Elective hand surgery on patients with diabetes, rheumatoid disease or patients who are receiving steroids. (Regimen 1)
4. Where percutaneous wires or pins are left in place, e.g. closed reduction and internal fixation of a closed fracture. (Regimen 1)
5. Pressure sore repair. (Regimen 2)
6. Perineal surgery. (Regimen 2)
7. Extensive or prolonged procedures. (Regimen 3)
8. Extensive trauma, heavily contaminated lesser wounds, traumatic wounds that are more than 6 hours old, all open fractures. (Regimen 3)
9. Animal and human bites. (Regimen 3)
10. Intra-oral and pharyngeal operations. (Regimen 3). In the case of cleft repairs, if pathogenic organisms are isolated from swabs, please inform the surgeon.
11. Patients with prosthetic heart valves or valvular disease. (Regimen 4)
12. Burns in children up to the age of 16 years. (Regimen 5)
13. Use of leech. (Regimen 6)
14. Breast surgery. (Regimen 7)

Regimen 1:

At induction of anaesthesia:

Adult: Flucloxacillin 1 g IV followed by 500 mg 6 hourly for 48 hours. Convert to oral as soon as possible.

Child under 2 years: ¼ of adult dose; aged 2-10 years: ½ adult dose.

In patients with Penicillin hypersensitivity:

Adult: Clindamycin 600 mg IV, followed by 300 mg 6 hourly for 48 hours. Convert to oral as soon as possible.

Children over 1 month of age: Clindamycin IV 15 mg/kg daily in 3-4 divided doses. Convert to oral as soon as possible 3 mg/kg 6 hourly. Note it is advisable to monitor liver and renal function when using Clindamycin in infants.

Option:

Extend use of Clindamycin to patients who do not have Penicillin hypersensitivity.

Regimen 2:

At induction of anaesthesia:

Adult: Metronidazole 500 mg IV plus Cefuroxime 1.5 g IV, followed by Metronidazole 500 mg IV 12 hourly and Cefuroxime 750 mg IV 8 hourly.

Convert as soon as possible to oral Metronidazole 400 mg 12 hourly plus oral Cephalexin 500 mg 8 hourly.

Children: Metronidazole 7.5 mg/kg IV 12 hourly and Cefuroxime 60 mg/kg/day in 3 divided doses.

Convert to oral as soon as possible. Oral Metronidazole 7.5 mg/kg 12 hourly plus oral Cephalexin: under 1 year 125 mg 12 hourly, 1-5 years 125 mg 8 hourly, 6-12 years 250 mg 8 hourly.

In patients with Penicillin hypersensitivity:

Adult: Clindamycin 300 mg IV 6 hourly and Ciprofloxacin 200 mg IV 12 hourly.

Convert to oral as soon as possible: Clindamycin 300 mg 6 hourly and Ciprofloxacin 250 mg 12 hourly.

Children: Clindamycin can be prescribed as in Regimen 1.

Ciprofloxacin use is not recommended in child except in exceptional situations where the benefit outweighs the risk. Recommend that advice is sought from Consultant Microbiologist for individual cases, if this situation arises.

For clean cases, prescribe for 48 hours.

For established infection, prescribe for 7 days and continue if clinically indicated. Change antibiotics if indicated when swab results become available.

Regimen 3:

Adults: Co-Amoxiclav 1 gm IV 8 hourly. Convert to oral 250 mg 8 hourly as soon as possible.

Children: Co-Amoxiclav 25 mg/kg IV 8 hourly. Convert to oral as soon as possible. Children under 6 years: oral suspension Co-Amoxiclav 125/31 0.8 ml/kg daily in 3 divided doses.

Children 6-12 years Co-Amoxiclav suspension 250/62 5 ml 8 hourly.

Please note that where the dose of Co-Amoxiclav is expressed in grams, that this reflects the Amoxycillin component of the preparation.

For clean cases, prescribe for 48 hours.

For major head and neck cases, prescribe for 5 days.

For established infection, prescribe for 7 days and then continue if clinically indicated. Antibiotics may need to be changed, based on swab results.

Regimen 4:

Adults: Teicoplanin 400 mg IV plus Gentamicin 120 mg IV, at induction of anaesthesia.

Children under 14 years: Teicoplanin 6 mg/kg IV plus Gentamicin 2 mg/kg IV.

Regimen 5:

On admission: Flucloxacillin for 48 hours, dose as in Regimen 1.

For Penicillin allergic children, use Clindamycin, as in Regimen 1.

For surgery, choice of prophylactic antibiotics should be made based on swab reports and the age of the patient. A single dose of IV antibiotics is recommended, at induction of anaesthesia.

Regimen 6:

Adults: Ciprofloxacin 500 mg 12 hourly orally. Commence immediately when leech is applied and continue for 24 hours after cessation of leech therapy.

Children: Co-Amoxiclav may be an alternative, but it is recommended that the individual case be discussed with microbiology.

Regimen 7:

Adults: Flucloxacillin 2 g at induction of anaesthesia. If a breast implant has been used, then one further post-operative dose of Flucloxacillin is indicated.

In patients with Penicillin hypersensitivity:

Clindamycin 600 mg can be substituted for Flucloxacillin 2 g.

Avoid urinary catheterization. If urinary catheterization must be carried out, then it should be done pre-operatively or at induction of anaesthesia.

At pre-assessment, patients should be asked specific questions, concerning symptoms of urinary tract infection. A routine dipstick test of urine should be carried out on patients present for breast implant surgery. If the dipstick test is positive, an MSU should be sent. If the patient's history is suspicious of a urinary tract infection, an MSU should be sent. This should be brought to the attention of the operating surgeon.

Un-investigated but symptomatic potential urinary tract infections is a contraindication to breast implant surgery.