

ROUTINE ANTIBIOTIC PROPHYLAXIS RECOMMENDATIONS SUMMARY (Therapeutic Guidelines Antibiotic Version 14 2010***)

SURGERY TYPE	Recommendation	Comments
CARDIAC SURGERY Valve replacement; coronary artery bypass surgery, cardiac transplantation, pacemaker insertion	Cephazolin 1g (adult ≥ 80 kg: 2g)(child: 25 mg/kg up to 1g) IV, at induction then 8-hourly for 2 further doses OR THE COMBINATION OF Di/flucloxacillin 2g (child 50mg/kg up to 2g) IV, at induction then 6 hourly for 3 further doses PLUS Gentamicin (adult and child) 5mg/kg IV at the time of induction If there are indications for the use of Vancomycin (See Guidelines p.188) use: Vancomycin 25mg/kg up to 1.5g(child < 12 yrs: 30 mg/kg up to 1.5g) IV, ending infusion just before the procedure - slow infusion required see p. 339) then repeat after 12 hours PLUS Gentamicin 2mg/kg IV, at induction	Consider vancomycin if: <ul style="list-style-type: none"> • MRSA colonized, infected past/present • MRSA exposed e.g. > 5 d in healthcare facility where MRSA endemic • reoperations • severe β-lactamase hypersensitivity
ORTHOPAEDIC SURGERY Prosthetic large joint replacement etc	Cephazolin 1g (adult ≥ 80 kg: 2g)(child: 25 mg/kg up to 1g) IV, at induction OR Di/flucloxacillin 2g (child: 50 mg/kg up to 2g), IV, at induction	Vancomycin should be considered in same circumstances as described above; same dose as above but no recommendation for repeat infusion
ABDOMINAL SURGERY Colorectal, appendicectomy, upper GI tract or biliary surgery including laparoscopic surgery	Metronidazole 500mg (child 12.5 mg/kg up to 500mg), IV, ending infusion at the time of induction PLUS EITHER Cephazolin 1g (adult ≥ 80 kg: 2g)(child: 25 mg/kg up to 1g) IV, of induction OR Gentamicin 2 mg/kg IV, at induction	For low risk patients* metronidazole may be omitted + see guidelines for definition of low risk
HERNIA REPAIR	No prophylaxis recommended for hernia repair <u>without</u> prosthetic material For hernia repair with prosthetic material use: Cephazolin 1g (adult ≥ 80 kg: 2g)(child: 25 mg/kg up to 1g) IV, at induction	
HYSTERECTOMY & TERMINATION OF PREGNANCY	Cephazolin 1g (adult ≥ 80 kg: 2g) IV, at induction PLUS EITHER Tinidazole 2g orally, 6 to 12 hours prior to induction OR Metronidazole 500mg IV, ending infusion at induction ALTERNATIVELY AS A SINGLE DRUG USE Cefoxitin 2g (Child: 40mg/kg up to 2g) IV, at induction	
CAESAREAN SECTION	Cephazolin 1g (adult ≥ 80 kg: 2g) IV, before skin incision	Although it has been common practice to administer abs after cord clamping; recent studies have shown lower infection rates without compromising neonatal outcome if px administered prior to skin incision

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UROLOGICAL SURGERY	If immediate operation is required and there is bacteriuria or clinical evidence of UTI Gentamicin - 4 to 6mg/kg (dosing complex; see antibiotic guidelines Table 24, p.360) (child less than 10 years: 7.5mg/kg; 10 years or more: 6mg/kg) IV, as a single dose	Sterilisation of the urinary tract prior to elective urological procedures. Therapy based on urinary pathogens. If the urinary tract is sterile no prophylaxis is required.
PROSTATECTOMY	Gentamicin 2 mg/kg IV, at induction	
TRANSRECTAL PROSTATIC BIOPSY	Ciprofloxacin 500mg orally, as a single dose, 1 hour prior to procedure	
LOWER LIMB AMPUTATION	Benzylpenicillin 1.2 g(child: 30mg.kg up to 1.2g)IV, at induction then 6-hourly 3 further doses OR Metronidazole 500mg (child: 12.5mg/kg up to 500mg) IV, ending infusion at induction then repeat after 12 hours	
NEUROSURGERY Prolonged craniotomy procedures, re-explorations and microsurgery or insertion of prosthetics	Cephazolin 1g (adult >=80kg: 2g)(child: 25 mg/kg up to 1g) IV, at induction OR Di/flucloxacillin 2g (child: 50 mg/kg up to 2g), IV, at induction	
VASCULAR SURGERY Arterial reconstructive surgery involving abdominal aorta and/or lower limb, implantation of foreign material	Cephazolin 1g (adult >=80kg: 2g)(child: 25 mg/kg up to 1g) IV, at induction and then 8 hourly for 2 further doses OR THE COMBINATION OF Di/flucloxacillin 2g (child: 50 mg/kg up to 2g), IV, at induction and then 6 hourly for 3 further doses PLUS Gentamicin (adult and child) 5mg/kg IV, at the time of induction If Vancomycin is indicated use: Vancomycin 25mg/kg up to 1.5g(child < 12 yrs: 30 mg/kg up to 1.5g) IV, ending infusion just before the procedure - slow infusion required see p. 339) then repeat after 12 hours PLUS Gentamicin (adult and child) 5mg/kg IV, at induction	Vancomycin should only be used in specific circumstances (see above).

* **TIMING:** IV ANTIBIOTICS (EXCEPT VANCOMYCIN) SHOULD BE GIVEN AS SOON AS THE PATIENT IS STABILISED AFTER ANAESTHESIA. VANCOMYCIN REQUIRES A SLOWER INFUSION AND SHOULD BE COMPLETED JUST PRIOR TO INDUCTION

** **DURATION:** GIVING MORE THAN 1 OR 2 DOSES POSTOPERATIVELY IS NOT ADVISED EXCEPT WHERE SPECIFICALLY RECOMMENDED, THE PRACTICE OF CONTINUING PROPHYLACTIC ANTIBIOTICS UNTIL SURGICAL DRAINS HAVE BEEN REMOVED IS BOTH ILLOGICAL AND OF UNPROVEN BENEFIT

*** SUMMARY FROM THE "THERAPEUTIC GUIDELINES ANTIBIOTIC VERSION 14 2010" - COVERS GENERAL PRINCIPLES ONLY