

Vascular Surgery Surgical Antibiotic Prophylaxis Guidelines

PRE-OPERATIVE CONSIDERATIONS

Drug administration

- Slow IV bolus – should be given ≤ 60 minutes before skin incision (ideally at 30 minutes). Administration after skin incision or > 60 minutes before incision reduces effectiveness
- IV infusion – should be timed to end ≤ 30 minutes before skin incision

Pre-existing infections (known or suspected) – if present, use appropriate treatment regimen instead of prophylactic regimen for procedure. Doses should be scheduled to allow for re-dosing just prior to skin incision.

PROPHYLAXIS REGIMEN

Procedures	First line regimen	Alternative (Immediate type or severe penicillin or cephalosporin hypersensitivity)
Vascular reconstruction (e.g. abdominal aorta, graft/stent insertion, groin incision)	Cephazolin 2g IV bolus over 5 minutes before incision, then 8-hourly for 24 hours post-operatively	Vancomycin 1g IV infused over 100 minutes before incision, (1.5g IV for patients > 80 kg infused over 150 minutes) then 12 hours post-operatively
Amputation of ischaemic limb	Cephazolin 2g IV bolus over 5 minutes before incision, then 8-hourly for 24 hours post-operatively plus Metronidazole 500mg IV before incision, then 12 hours post-operatively	Vancomycin 1g IV infused over 100 minutes before incision, (1.5g IV for patients > 80 kg infused over 150 minutes) then 12 hours post-operatively plus Metronidazole 500mg IV infused over 20 minutes before incision, then 12 hours post-operatively
AV fistula formation (with prosthetic material)	Cephazolin 2g IV (single dose only) bolus over 5 minutes before incision	Vancomycin 1g IV (single dose only) infused over 100 minutes before incision, (1.5g IV for patients > 80 kg infused over 150 minutes)
All other clean procedures (e.g. thoracoscopic sympathectomy, stripping/ligation of varicose veins,)	Nil recommended	Nil recommended

MRSA COLONISATION

Patients with a history of MRSA colonisation or infection

ADD

Vancomycin 1g IV infused over 100 minutes before incision, (**1.5g IV** for patients > 80 kg infused over 150 minutes)

DURATION OF PROPHYLAXIS

Prophylaxis should be no greater than 24 hours, with a single dose sufficing in most cases. A second dose should be given if the procedure is longer than two half lives of the agent used. (e.g. 4 hours for cephazolin) Continuing antibiotic administration is not appropriate unless infection is confirmed or suspected – modify antibiotic regimen appropriately according to treatment guidelines.

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