

Adult Antimicrobial Prophylaxis Guidelines in Vascular Surgery

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This guideline outlines a standardized approach for prophylactic antimicrobial regimens in patients undergoing major arterial vascular surgery.

This guideline is for use by the following staff groups :

Department of Vascular Surgery, Surgical Division, Worcestershire Acute Hospitals NHS Trust.

Lead Clinician(s)

Dr Amie Ford Core Surgical Trainee in Vascular Surgery

Approved by Vascular Consultant Body on: 10th June 2021

Approved by Dr Hugh Morton, Consultant Microbiologist & Antimicrobial Stewardship Lead on: 11th June 2021

Approved by Medicines Safety Committee on: 14th July 2021

Review Date: 14th July 2024

This is the most current document and should be used until a revised version is in place

Key amendments to this guideline

Date	Amendment	Approved by:
14 th July 2021	New document approved	MSC

Adult Antimicrobial Prophylaxis Guidelines in Vascular Surgery

Title of Guideline

WAHT - Adult Antimicrobial Prophylaxis Guidelines in Vascular Surgery

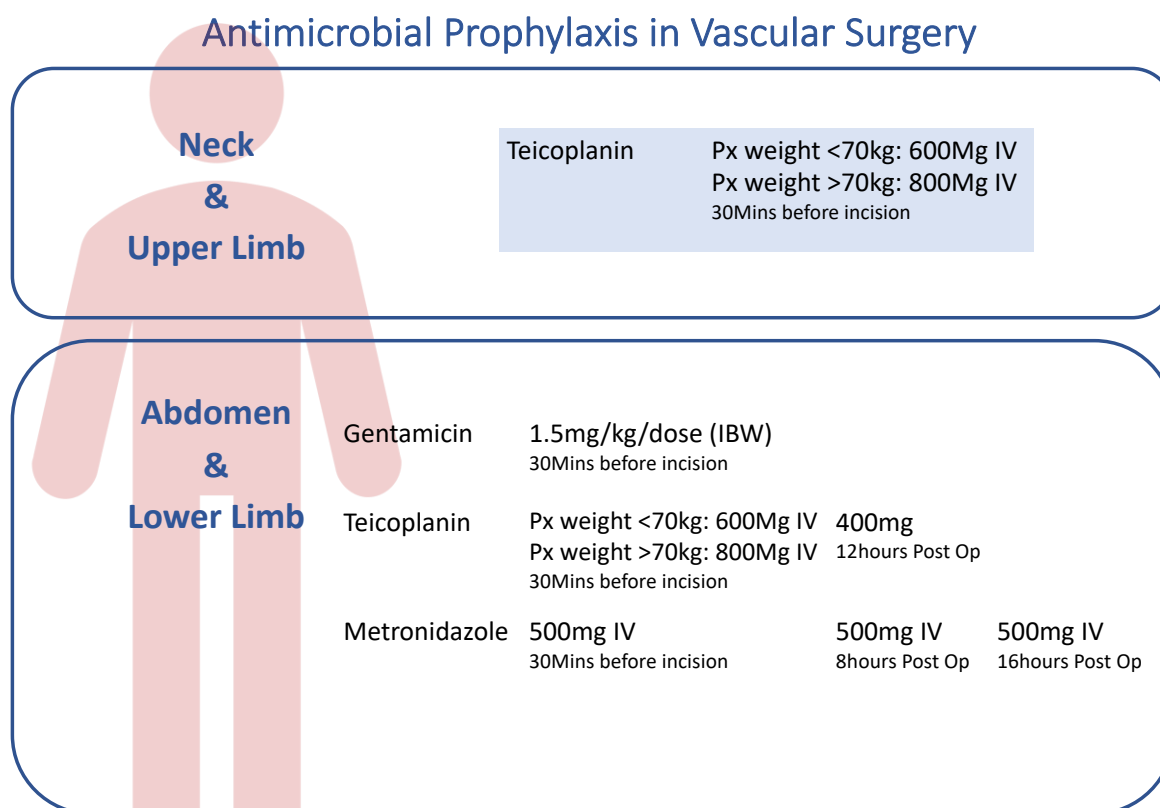
Introduction

Guideline developed following a clinical Audit* which was completed as result of discussion regarding antibiotic stewardship at a clinical governance meeting in 2020.

- The objective for this guideline is to ensure that the appropriate prophylactic antibiotic regimes are prescribed for patients undergoing major vascular surgery.
- To ensure good compliance with antibiotic stewardship.
- To establish the current practice of using prophylactic antibiotics in patients undergoing vascular surgery.
- To implement a standardized practice to prescribing prophylactic antibiotics in the department of vascular surgery; Worcestershire Acute Hospitals NHS Trust.

*An Audit to assess the Compliance of Pre-operative Antibiotic prescribing in Vascular Surgery patients ID 10952.

Details of Guideline - WAHT - Adult Antimicrobial Prophylaxis Guidelines in Vascular Surgery



Neck & Upper Limb

Including:

- Neck: Carotid endarterectomy with or without prosthesis
- Upper Limb: Upper limb embolectomy or elective revision surgery

Organisms:

S.aureus, beta-haemolytic Streptococci, oral Gram-positive cocci, anaerobes

Single dose regimen

Pre Procedure:

Teicoplanin:

- Px weight <70kg: 600Mg
- Px weight >70kg: 800Mg
 - 30Mins before skin incision

Abdomen & Lower Limb

Including:

- Abdomen: Open abdominal aortic aneurysm repair, Endovascular aortic repair
- Lower limb with or without prosthesis: Lower limb bypass, In-flow bypass (aorto-bifemoral, axillo-bifemoral, femoral-femoral crossover) or elective revision surgery

Organisms:

S.aureus, coliforms, beta-haemolytic Streptococci, anaerobes

24hr dosing regimen:

Pre Procedure:

Gentamicin:

- 1.5mg/kg/dose (IBW) IV
 - 30Mins before skin incision

Teicoplanin:

- Px weight <70kg: 600Mg IV
- Px weight >70kg: 800Mg IV
 - 30Mins before skin incision

Metronidazole:

- 500mg IV
 - 30Mins before skin incision

Post Procedure:

Teicoplanin:

- 400mg IV
 - 8hours post procedure

Metronidazole:

- 500mg IV
 - 8hours post procedure
- 500mg IV
 - 16hours post procedure

Varicose Veins

Antimicrobial Prophylaxis is NOT recommended.

Further considerations for ALL patients:

- This regimen is suitable for penicillin allergic patients. Should allergies to indicated antimicrobials be noted, please consult with microbiology for specialist advice and document accordingly.
- Screen patients for MRSA prior to surgery according to the WAHT MRSA policy.
- Review previous microbiology results for any other multi-resistant organisms.
- For best efficacy, antibiotics should be delivered 30-60minutes before skin incision (ECCMID consensus 2014); for practical reasons, doses will usually be given on induction of anaesthesia.
- All exceptions to antibiotic prophylaxis guidelines (eg. is not given when recommended or alternative drug choice) should be clearly documented with justification in medical case notes.
- All antimicrobial prophylaxis should be prescribed on the once only medication section of the inpatient drug chart.
- If procedure lasts >8hours, then 8hour doses should be administered intra-operatively.
- In the event of major intra-operative blood loss (>1500mls), additional antibiotic coverage beyond guideline regimens should be considered.

It is the responsibility of every individual to ensure this is the latest version as published on the Trust Intranet

Monitoring Tool

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
	Compliance to Guideline for Surgical Prophylaxis	Re-Audit	Twice per year	Departmental Lead responsible for allocating audit team.	Vascular Department – to be presented to Clinical Governance meeting.	Per Audit cycle. Twice per year.

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Miss N Charlwood – Vascular Consultant, Departmental Lead
Mr S Goodyear – Vascular Consultant, Director of Surgery
Professor R Downing – Vascular Consultant
Mr I Nyamekye – Vascular Consultant
Mr A Atwal – Vascular Consultant
Mr A Bajwa – Vascular Consultant
Dr H Morton – Microbiology Consultant, AMS Lead
Keith Hinton – Lead Pharmacist, Surgical Division

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Vascular Clinical Governance Meeting and Multiple MDT sessions.

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	Does the policy/guidance affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the policy/guidance likely to be negative?	No	
5.	If so can the impact be avoided?	No	
6.	What alternatives are there to achieving the policy/guidance without the impact?	No	
7.	Can we reduce the impact by taking different action?	No	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.