



---

## Venesection Procedure

---

### 1. Purpose

Therapeutic venesection is a procedure where blood is removed from a patients' circulation and has been shown to be beneficial in patients with conditions such as Haemochromatosis, Polycythaemia Vera and Porphyria Cutanea Tarda. Venesection is also used to treat post bone marrow transplant patients who are iron overloaded due to multiple blood transfusion.

Venesection is generally safe and carries few side effects, however there are risks associated with the procedure for both patients and healthcare professionals who can be exposed to blood borne pathogens.

The purpose of this document is to ensure that nursing staff are aware of the preadmission, procedural and discharge requirements when completing a therapeutic venesection on a patient. Only nursing staff working within their scope of practice may perform a venesection using venepuncture and cannulation techniques.

This procedure is applicable to **adult** patients undergoing therapeutic venesection only.

### 2. Procedure

#### 2.1 Prior to Commencing Venesection

##### Referral

The patient must have a valid referral from a medical officer for the procedure to occur. If there is no referral or if the referral is greater than 6 months old, the procedure cannot proceed.

Venesection should not be completed outside normal business hours, to ensure adequate staff are available to assist should an adverse event occur. A medical officer must be present onsite and available to attend within minutes in the event of an adverse event.

Patients should have management goals set in terms of laboratory parameters, and these patients should be monitored regularly so that set targets are met and not exceed as to render them anaemic and acutely symptomatic.

##### Consent

The patient must have a consent form completed every twelve (12) months in line with the WACHS [Consent to Treatment Policy](#).

The medical officer is responsible for ensuring valid written consent has been obtained prior to the venesection. They should also document regularity of procedure as well as volume to be removed at each session.

## Nursing Admission and Assessment

The following assessments must be completed prior to the venesection:

- baseline vital signs - Blood pressure, pulse, temperature, respirations and oxygen saturations
- adequate pre-venesection hydration, recent hydration i.e. not fasting
- current haemoglobin result – if less than 120 g/L, do not venesect, refer back to referring doctor
- current serum ferritin must be greater than 300 (males) or greater than 200 (females) micrograms/L at first venesection in a series, falling to not less than 50 micrograms/L during a course of bleeds. 50 micrograms/L is the ferritin value below which a series of venesections should cease
- see [Appendix A](#) for common venesection therapies
- patient identification (ID) band insitu and identity is confirmed
- procedure has been explained
- patient consent obtained.

If any physiological observations fall within the escalation criteria of the [MR140A Adult Observation and Response Chart \(A-ORC\)](#) care should be escalated following the [Recognising and Responding to Acute Deterioration Procedure](#).

The venesection must not commence without authorisation of a medical officer if observations sit within the escalation criteria.

## Documentation

Documentation relating to the procedure must be completed in the Electronic Medical Record (EMR) or on an [MR5 Outpatient Notes](#) or [MR55A Integrated Progress Note](#).

Included in the documentation must be both an order for the procedure and the amount of blood to be removed (typically around 500mL's). All observations must be documented on the [MR140A Adult Observation and Response Chart \(A-ORC\)](#).

If patient requires IV fluids pre or post venesection, order must be prescribed on [MR176 Intravenous Fluid Treatment](#).

## 2.2 Venesection Procedure

### Equipment

The following equipment is required to perform a venesection:

- scales
- closed collection system
- 16-18g cannula (if not attached to collection bag)
- peripheral Intravenous Catheter (PIVC) insertion kit
- non-sterile gloves or sterile gloves if vein is palpated after antiseptic solution application
- 3-way tap (if required for post venesection hydration)
- 70% isopropyl alcohol and 2% chlorhexidine swabs
- protective eyewear
- puncture resistant (sharps) container

- pillow as required for positioning limb
- rubbish bag.

## Procedure

Venesection should take approximately 20 – 40 minutes, nursing staff should perform the following:

- lie patient on a bed or chair and ensure they are comfortable
- perform hand hygiene at the appropriate various intervals throughout the procedure
- assemble equipment
- assess veins and select a site, preferably in the antecubital fossa or a large palpable vein (**do not** venesect arm with arteriovenous fistula (A-V fistula) insitu or prior axillary node surgery)
- apply tourniquet 7-10 cm above antecubital fossa, ensure arterial flow is not obstructed by checking for presence of radial pulse
- using Aseptic Non-Touch Technique® (ANTT) and adhering to WACHS guidelines for cannulation insert the venesection needle (or IV cannula) swiftly and smoothly at an angle of less than 30 degrees until flash back is obtained
- open clamp on venesection bag, and secure line to patients skin using micropore tape
- place venesection bag on scales, scales must be placed lower than the level of the needle to ensure gravity flow into the venesection bag
- ask patient to open and close fist gently every 10-12 seconds to promote blood flow, do **DO NOT** pump fist as it can elevate levels of potassium and ionised calcium in the bloodstream (releasing or tightening of the tourniquet will increase or decrease blood flow as required)
- once required amount of blood has been removed, undo tourniquet, clamp venesection bag and withdraw needle gently (unless patient requires post venesection hydration) applying pressure to the site using gauze. Advise the patient to avoid bending their arm as this increases the risk of developing a haematoma
- discard the venesection bag and needle into a sharps container if site appropriate, otherwise follow local site practice
- perform post-venesection vital signs, escalate care if any vital signs are outside of patients normal limits
- complete post procedure documentation including: site of needle insertion; vital signs; volume of blood collected, duration of procedure, patient's tolerance to procedure and any adverse incidents that occurred

## Possible Complications

Possible complications of venesection can include:

- hypovolaemia
- vasovagal syncope
- venous scarring
- phlebitis
- adverse reaction to lignocaine if used.

**ATTENTION**

If the patient becomes tachycardic, hypotensive, restless or clammy

- **STOP the** procedure and review the patient and
- initiate medical emergency response procedures

**Post Procedure**

When the venesection is complete:

- Ask the patient to remain sitting or lying for 5-10 minutes
- Inspect venepuncture site for signs of haematoma
- Ask the patient to sit up slowly, ensuring they are not dizzy or light-headed
- Offer the patient something to eat and drink

**Discharge**

The patient may be discharged once they meet the following criteria:

- vital signs are within normal limits for the patient and do not fall within the colour shaded area
- have tolerated fluids
- not dizzy when standing or walking
- IV site is not oozing or developed a haematoma.

**3. Roles and Responsibilities**

The **Registered Nurse/Midwife/Nurse Practitioner** is responsible for

- the therapeutic collection and ensuring patient safety during and post procedure
- having completed the mandatory (once) [Aseptic Technique \(ICATC EL2\)](#) e-learning via MyLearning.
- working within their scope of practice when performing venepuncture or intravenous (IV) cannulation.

**The Medical Officer** is responsible for accepting the patient and ensuring valid written consent has been obtained prior to the venesection.

**All staff** are required to comply with the directions in WACHS policies and procedures as per their roles and responsibilities. Guidelines are the recommended course of action for WACHS and staff are expected to use this information to guide practice. If staff are unsure which policies procedures and guidelines apply to their role or scope of practice, and/or are unsure of the application of directions they should consult their manager in the first instance.

**4. Monitoring and Evaluation**

Compliance monitoring as part of ANTT auditing via regional and site infection control. [MP 0108/19 Healthcare-associated Infection Surveillance in Western Australia](#) (monthly statewide Healthcare Infection Surveillance WA [HISWA]) [HISWA](#) website.

## 5. References

Nil

## 6. Definitions

Term	Definition
<b>Arteriovenous Fistula</b>	An arteriovenous (AV) fistula is a surgical connection between an artery and a vein used for dialysis access
<b>Antiseptic non-touch technique</b>	Aseptic non-touch technique (ANTT) is set of practices that help prevent the spread of infection during medical procedures
<b>Haemochromatosis</b>	Haemochromatosis is a genetic disorder causing iron accumulation
<b>Healthcare Infection Surveillance Western Australia</b>	The Healthcare Infection Surveillance Western Australia (HISWA) is a program which monitors healthcare associated infection in Western Australia via mandatory reporting
<b>Haemoglobin</b>	Haemoglobin (Hb) is a protein contained in red blood cells that is responsible for delivery of oxygen to the tissues
<b>Intravenous</b>	Intravenous (IV) is a method whereby blood is collected via a vein
<b>Peripheral Intravenous Catheter</b>	A peripheral intravenous catheter (PIVC) is a device that allows medication fluid to be delivered intravenously or to remove a persons blood (i.e. venesection)
<b>Polycythaemia Rubra Vera</b>	Polycythaemia Rubra Vera is a bone marrow disorder causing an excess of red blood cells
<b>Poryphria Cutanea Tarda</b>	Porphyria Cutanea Tarda is an autoimmune disorder causing irritable rash/blisters
<b>Serum Ferritin</b>	Serum ferritin (SF) is a measurement of ferritin in the blood, which indicates the body's iron stores

## 7. Document Summary

<b>Coverage</b>	WACHS wide
<b>Audience</b>	Medical, Nursing
<b>Records Management</b>	Clinical: <a href="#">Health Record Management Policy</a>
<b>Related Legislation</b>	<a href="#">Health Services Act 2016</a> (WA)
<b>Related Mandatory Policies/Frameworks</b>	<ul style="list-style-type: none"> <li>• MP 0108/19 <a href="#">Healthcare-associated Infection Surveillance in Western Australia</a></li> <li>• MP 0038-16 <a href="#">Insertion and Management of Peripheral Intravenous Cannulae in Western Australian Healthcare Facilities</a></li> <li>• MP 0175/22 <a href="#">Consent to Treatment Policy</a></li> <li>• <a href="#">Code of practice for clinical and related waste management</a></li> <li>• <a href="#">Clinical Governance, Safety and Quality Policy Framework</a></li> </ul>
<b>Related WACHS Policy Documents</b>	<ul style="list-style-type: none"> <li>• <a href="#">Hand Hygiene Policy</a></li> <li>• <a href="#">Specimen Collection (including Phlebotomy) and Pathology Results Clinical Practice Standard</a></li> <li>• <a href="#">Infection Prevention and Control Policy</a></li> <li>• <a href="#">Recognising and Responding to Acute Deterioration Procedure</a></li> <li>• <a href="#">Peripheral Intravenous Cannula (PIVC) Guideline</a></li> <li>• <a href="#">Patient Blood Management Policy</a></li> <li>• <a href="#">Vascular Access Devices Management Clinical Practice Standard</a></li> <li>• <a href="#">Admission, Discharge and Intra-hospital Transfer Clinical Practice Standard</a></li> </ul>
<b>Other Related Documents</b>	Nil
<b>Related Forms</b>	<ul style="list-style-type: none"> <li>• <a href="#">MR140A Adult Observation and Response Chart (A-ORC)</a></li> <li>• <a href="#">MR55A Integrated Progress Note</a></li> <li>• <a href="#">MR176 Intravenous Fluid Treatment</a></li> <li>• <a href="#">MR5 Outpatient Notes</a></li> </ul>
<b>Related Training</b>	Available from <a href="#">MyLearning</a> : <ul style="list-style-type: none"> <li>• Aseptic Technique (ICATC EL2)</li> <li>• Peripheral Intravenous Cannulation Insertion (IVCWA 001)</li> <li>• Peripheral Intravenous Cannulation Insertion (IVCWA EL1) 2022</li> </ul>
<b>Aboriginal Health Impact Statement Declaration (ISD)</b>	ISD Record ID: 4085
<b><a href="#">National Safety and Quality Health Service (NSQHS) Standards</a></b>	7.01, 7.02, 7.09

<b><u>Aged Care Quality Standards</u></b>	Nil
<b><u>Chief Psychiatrist's Standards for Clinical Care</u></b>	Nil
<b><u>Other Standards</u></b>	Nil

## 8. Document Control

Version	Published date	Current from	Summary of changes
4.00	08 April 2025	08 April 2025	<ul style="list-style-type: none"> <li>• Language contemporised</li> <li>• Process instructions expanded</li> <li>• Addition of an Appendix A: Venesection Therapies Guide</li> </ul>

## 9. Approval

<b>Policy Owner</b>	Executive Director Clinical Excellence
<b>Co-approver</b>	Executive Director Nursing and Midwifery Executive Director Medical Services
<b>Contact</b>	Blood Management Clinical Nurse Consultant
<b>Business Unit</b>	Patient Safety & Quality
<b>EDRMS #</b>	ED-CO-14-44577
<p><i>Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.</i></p>	

**This document can be made available in alternative formats on request.**

## Appendix A: Venesection Therapies Guide

Condition	Initial Therapy	Maintenance Therapy
Haemochromatosis	Venesect every 1-2 weeks Aim for: <ul style="list-style-type: none"> <li>• Serum ferritin 50-100µg/L</li> <li>• Transferrin &lt;50%</li> <li>• Haematocrit 0.33-0.45</li> <li>• Haemoglobin &gt;110g/L</li> </ul>	Venesect every 2-4 months to maintain serum ferritin <100µg/L or as guided by a medical officer
Iron Overload	Venesect 2-4 weekly Aim for: <ul style="list-style-type: none"> <li>• Haemoglobin &gt;110g/L</li> <li>• Haematocrit &gt;0.33</li> <li>• Serum ferritin &lt;500µg/L</li> </ul>	Seek medical review once target Ferritin is achieved for further plan.
Primary Polycythaemia Vera	Venesect every 1-2 weeks until Haemoglobin normalises Aim for: <ul style="list-style-type: none"> <li>• Transferrin &lt;50%</li> <li>• Haematocrit &lt;0.45</li> <li>• Haemoglobin normal range</li> </ul>	Venesect 4-6 weekly to maintain Haemoglobin within normal range.
Poryphryia Cutanea Tarda	As per admitting medical officer	As per admitting medical officer