Policy Category	BC - Best Care		
Best Care Goals	☒ Safe ☐ Personal ☐ Connected ☐ Effective		
Applies To	National		
Version	**Approval Authority**	**Effective from**	**Review by date**
1	National Medical Director, WA	7/09/2021	7/09/2024

Contents

1. Rationale

The purpose of this Clinical Protocol is to provide a guiding framework for Hospital at the Home service Medical Practitioners and clinical staff.

Suspected Deep Vein Thrombosis is generally be treated with LMWH whilst awaiting imaging results.

2. Scope

The Clinical Protocol applies to Nationally for HATH and in-home clients where deep vein thrombosis is suspected and does not apply to clients with confirmed diagnosis of deep vein thrombosis. Upon confirmation of DVT the DVT pathway will apply.

3. Acceptance to HATH Criteria and Pathway

RED Unacceptable for community admission to HATH Refer to ED/ Inpatient management. (May become suitable for HATH after ED or inpatient stabilisation)	• Co-existing medical conditions requiring hospital admission • Known or suspected hypersensitivity to warfarin or LMWH/other (eg. clexane, fondaparinux) (unless under the governance of Haematology Consultant or thrombosis clinic) • Pregnancy < 22 wks, unless under the governance of a Haematology, O and G or Cardiothoracic Consultant for high risk conditions e.g mechanical valve. Warfarin is teratogenic and is Pregnancy category D
ORANGE Requires discussion with Medical Governance prior to acceptance	• Over 13 years, suitable for adult dosing and under the care of a specialist team • Increased risk factors for bleeding- e.g recent surgery, recent falls or increased risk of falls (eg neurodegenerative conditions), familial bleeding disorder, GI bleeds, chronic liver disease, history of recurrent epistaxis, thrombocytopenia, uncontrolled hypertension • Increased risk factors for clotting- mechanical valves (especially mitral), mitral valve disease, recent VTE, carotid artery disease, arterio-embolic disease whilst on anticoagulation.
GREEN Accepted for HATH	• Suspected DVT and Echo Doppler studies available next working day. • Client's medical condition has been assessed as stable, has a clear diagnosis, management plan, prognosis and is at low risk of deterioration.

4. Pathology Work Up

Verify if any recent pathology has been ordered prior to requesting the below:

- Baseline blood tests:
  - Full blood picture (FBP) for baseline platelet counts
  - Urea & electrolytes to assess renal function
  - Coagulation profile (INR, APTT, fibrinogen)
  - Liver function tests
- **Day 5: Repeat FBP to assess platelet count for heparin induced thrombocytopenia.**
  - Refer to eTG anticoagulation guidelines for further guidance on heparin induced thrombocytopaenia and seek advice from medical governance if evidence of heparin induced thrombocytopenia

5. General Management

- Access blood results from referral source.
- Collaborate with medical governance doctor regarding any abnormal test results.
- Daily nursing assessment as per Deep Vein Thrombosis (DVT) Assessment Tool.
- Collaborate with medical governance doctor if any deterioration in client's condition.
- Administer enoxaparin sodium as per medical authority with dosing guidelines below.
- Encourage gentle ambulation and elevation of both legs when resting.
- Confirm Echo Doppler studies appointment.

6. Medical Management / Treatment Plan

Recommended enoxaparin dose

Renal function	Treatment dose
Normal renal function CrCl > 30mL/min	• 1.5 mg/kg SC daily* or • 1 mg/kg SC BD**
Severe renal impairment CrCl < 30mL/min	• 1 mg/kg SC daily
* If dose required is greater than 150mg, dose must be given as twice daily dose. **Twice-daily dosing of enoxaparin is preferred for patients at high risk of bleeding, or of thrombosis, such as patients who are older, obese or have a malignancy.	

- Follow up results of Doppler, and progress if requested to definitive treatment of DVT confirmed.

7. Monitoring

- Monitoring as per DVT clinical pathway.

8. Medical Governance

- The client must have access to medical governance support for 24 hours per day, 7 days per week.
- Primary medical governance can be by referring medical specialists, credentialed referring GPs or by Silver Chain medical staff.
- When governance is retained by a Silver Chain medical officer the client will have a medical review within 48 hours of admission and the medical officer will determine when the scheduled follow up and discharge will occur.
- Where the primary medical governor is unavailable the Silver Chain medical officer can provide the medical governance.
- Care delivery is planned and provided in consultation with the client, medical officer/specialist holding medical governance and nursing staff.
- In the instance when a client's condition deteriorates the Silver Chain medical officer or nursing staff will confer with referring medical officer or an emergency department medical officer.
- A summary of the episode of care is sent to the referrer or the client's GP at discharge.

9. Discharge Planning

- Ensure the client has an appointment arranged with own General Practitioner (GP) prior to discharge to ensure continuity of care- especially if Silver Chain is not providing management for initiation of anticoagulation if DVT is confirmed.
- Fax client discharge summary to GP, ensuring discharge summary any key clinical risks identified.

10. Supporting Documents

Silver Chain Group documents that directly relate to and inform this Clinical Protocol are available with this document in the Policy Document Management System (PDMS).

Other documents that directly relate to and inform this Clinical Protocol are as follows:

- Winter M, Keeling D, Sharpens F, Cohen H, Vallance P. Procedures for the outpatient management of patients with deep vein thrombosis. Clin Lab Haem 2005; 27:61-66.
- Deep Vein Thrombosis, Therapeutic Guidelines Ltd (eTG March 2017 edition) Therapeutic Guidelines Available from: deep-vein-thromobosis-and-pulmonary-embolism-treatment&guideline
- Therapeutic Guidelines. eTGcomplete: Cardiovascular Anticoagulant Therapy (eTG March 2021 edition) https://tgldcdp-tg-org-au.silverchain.idm.oclc.org/viewTopic?topicfile=anticoagulant-therapy
- WA TAG Information for Patients. Living with Warfarin. Department of Health 2016. http://www.watag.org.au/wamsg/docs/Living_with_Warfarin.pdf

11. Document Details

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Document Type	CP – Clinical Protocol
Consumer Participation	☐ Yes ☒ Not Applicable
Functional Area	Acute
Risk Rating	Moderate
Periodic Review	36 months

Silver Chain Group's policies align with relevant legislation and standards and are based on providing a fair, inclusive and safe working environment free from bullying and discrimination and one that enables equal opportunity for all Silver Chain staff. Our policies embody our values of Care, Community, Integrity and Excellence.

Appendix A: Management of Bleeding and/or High INR (Over-anticoagulation)

Principles

- INR > 3.5 on Point of Care (POC) machine e.g. Coagulochek mandates laboratory specimen to be taken.
- Laboratory specimen is considered as 'gold standard' and should be utilised in preference to POC machine.

High Bleeding Risk

- Recent major bleed (within 4 weeks)
- Major surgery (within 2 weeks)
- Thrombocytopaenia (platelet count < 50 x 10^9/L)
- Known liver disease
- Concurrent antiplatelet therapy

Management of patients on warfarin therapy with bleeding*

Clinical setting	Recommendation
INR ≥ 1.5 with life threatening bleeding	Cease warfarin and transfer immediately to hospital
INR ≥ 2.0 with clinically significant bleeding	Cease warfarin and transfer immediately to hospital
Any INR with minor bleeding	Omit warfarin, repeat INR following day and adjust warfarin dose to maintain INR in the target therapeutic range **If bleeding risk is high or INR > 4.5 refer to hospital for administration of vitamin K**

*indication for warfarin therapy should be reviewed; if clinically appropriate, consider permanent cessation.