CLINICAL PROTOCOL FOR PULMONARY EMBOLUS

Inclusion Criteria	Exclusion Criteria
• Confirmed Diagnosis of Pulmonary Embolism via CT or VQ scan • Over 16 years of age but not under the care of a paediatrician. • Less than 22 weeks gestation. • Patient's medical condition has been assessed as stable, has a clear diagnosis and prognosis and is at a low risk of rapid deterioration.	• Co-existing medical conditions requiring hospital admission • Severe respiratory or cardiovascular symptoms requiring hospital admission • Conditions that increase risk of bleeding: - Recent major surgery - History of familial bleeding disorder - Peptic Ulcer disease - Increased risk of falling - Thrombocytopenia • Renal insufficiency (creatinine clearance less than 30ml/min) • Known or suspected hypersensitivity to Warfarin or Exoxaparin (unless under governance of haematology consultant or thrombosis clinic at a tertiary centre

ASSESSMENT

1. Check INR.
2. Check Warfarin dose given to date (Marevan brand without substitution unless continuation of current treatment).

PATHOLOGY WORK UP

- Baseline International Normalised Ratio (INR), full blood picture (FBP), liver function tests (LFT), Urea and Electrolytes (U&E), Activated partial pro-thrombin time (APTT).
- Thrombophilia screening if family history, recurrent or spontaneous Pulmonary Embolism.
- Day 5 repeat FBP (possible thrombocytopenia).

Recommended Nomogram

Day	INR	Suggested Dose
1	1.0 → 1.4	5 mg
2 and 3	< 1.8	5 mg
	≥ 1.8	1 mg
4 and 5	< 1.5	7 mg
	1.5 – 1.9	5 mg
	2.0 – 2.5	4 mg
	2.6 – 3.5	3 mg
	> 3.5	0 mg *(see treatment)

This dosing regimen takes about 6 days to achieve therapeutic INR, longer in those under 60 years. If a shorter time to therapeutic levels is indicated or for younger patients consider 7 to 10mg on day 1 and 2. Consider smaller starting doses when the patient is elderly, has low body weight.

TREATMENT

- Access blood results from referral source including Thrombophillia screening, if appropriate, and scan results.
- Obtain last Warfarin dose from referral source if not documented on referral form.
- Collaborate with medical governance doctor regarding any abnormal test results.
- Enoxaparin Sodium administered as per medical authority and requires BD dosing
- Monitor INR Daily (utilising Coaguchek) and liaise with governance GP for dosing of Warfarin. (*If INR reading >3.5 formal blood test required for confirmation).
- Nursing Assessment as per Pulmonary Embolism assessment tool, collaborate with medical governance if any deterioration in client condition.
- Monitor and advise client regarding Warfarin including its potential complications and interactions with diet and alcohol as per living with Warfarin booklet.
- Once INR has reached prescribed therapeutic level continue to monitor client for forty eight hours and discharge in collaboration with medical governance.
- Continue to administer Enoxoparin Sodium for forty eight (48) hours to ensure target INR is maintained.

FOLLOW UP

- Client not to be discharged until an appointment with clients own GP has been confirmed for ongoing care.
- Fax current protocol with discharge summary to GP.

MEDICAL GOVERNANCE

Client has access to medical governance support twenty four (24) hours per day, seven (7) days a week. Care delivery is planned and provided in consultation with the client, medical officer/specialist holding medical governance and nursing staff. Medical specialists may retain medical governance with treatment interventions delivered by Silver Chain. When governance is retained by a Silver Chain medical officer the client will have a medical review within twenty four (24) hours of admission and scheduled follow-up up as determined by the medical officer for that individual client. In the instance when a client's condition deteriorates the Silver Chain medical officer or nursing staff will confer with an emergency department medical officer. All Silver Chain medical officers are formally credentialed. Silver Chain's medical officer holding governance will determine when the client can be discharged and a summary is sent to the referrer or client's general practitioner.

REFERENCES

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