

Institute / Department Protocol

Target Group: All Physician and Nurse Caregivers Treating acute coronary syndrome (ACS) Patients	Original Date of Issue: 29/04/2015	Date of Last Review: 17/11/2018	Publication Date: 14/02/2017
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Purpose

To provide physicians and nurses at CCAD with a standard protocol for using heparin to treat patients with acute coronary syndrome (ACS).

Protocol

1. Ordering

- 1.1. This protocol will be initiated by a physician order.
- 1.2. Subsequent orders specified by the protocol will be entered by a nurse as 'per protocol'.
- 1.3. Subsequent orders not specified in the protocol will require a physician order.

2. Heparin protocol

- 2.1. This protocol is for all ACS Patients with or without thrombolytics or glycoprotein IIb/IIIa agents and when lower range anticoagulation is desired.
- 2.2. Initial bolus and infusion are weight based.
 - 2.2.1. Initial bolus is 60 units/kg to a maximum of 4000 units.
 - 2.2.2. Initial infusion is 12 units/kg/hour to a maximum of 1000 units/hour.
- 2.3. Subsequent goal PTT is 53-71 seconds or goal of heparin anti-Xa units of 0.2-0.5 units/ml.
- 2.4. The first PTT is obtained 6 hours after the initial infusion is started.
- 2.5. Subsequent adjustments and PTT testing are based on the table below
- 2.6. Once 2 consecutive PTTs are within therapeutic range, repeat PTTACs daily.
- 2.7. Notify MD for 2 consecutive PTTACs <53 or >71 seconds.
- 2.8. For PTT values >150 sec consider holding the infusion for 1 hour and decreasing the infusion by 4 units/kg/hour.

3. Adjustment table

PTT Results (sec.)	Bolus	Infusion	Next PTT
<32.4	60 units/kg	↑4 units/kg	6 hours
32.4-52.9	30 units/kg	↑2 units/kg	6 hours
53-71.9	0	No change	6 hours
72-92.9	0	↓2 units/kg	6 hours
93-108.9	0	↓3 units/kg	6 hours
109-150	0 and hold infusion for 1 hour	↓4 units/kg	6 hours

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>150	0 and call physician	Stop infusion and call physician	6 hours
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Oversight and Responsibility

1. Quality & Patient Safety Institute
2. Pharmacy
3. Heart & Vascular Institute
4. Respiratory & Critical Care Institute

Definitions

1. None

References

1. Cleveland Clinic Low Dose/ACS Unfractionated Heparin Adult Patients

Institute / Department / Committee Involved in Procedure Development / Revision

1. Quality & Patient Safety Institute
2. Pharmacy
3. Heart & Vascular Institute
4. Respiratory & Critical Care Institute

Contact for Questions / Clarifications

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Related or Supporting Documents

1. None