

Protocol

Target Group: Physicians and Nurses	Original Date of Issue: Not Set	Date of Last Review: 19/01/2020	Publication Date: 19/01/2020
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Purpose

To provide physicians and nurses at Cleveland Clinic Abu Dhabi (CCAD) with a standard protocol for using heparin in new bioprosthetic valve replacements.

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 new bioprosthetic valve replacements when lower range anticoagulation is desired with no initial or subsequent boluses.
- 2.2. Initial infusion is weight based.
 - 2.2.1. No Initial bolus.
 - 2.2.2. Initial infusion is 12 units/kg/hour to a maximum of 1000 units/hour.
 - 2.2.3. Subsequent goal PTT is: 40-60 seconds.
- 2.3. The first PTT is obtained 6 hours after the initial infusion is started.
- 2.4. Subsequent adjustments and Partial Thromboplastin Time (PTT) testing are based on the table below.
- 2.5. Once 2 consecutive PTTs are within therapeutic range, repeat PTT daily.
- 2.6. Notify MD if 2 consecutive PTTs are outside desired range.

3. Adjustment Table

PTT Results (sec.)	Bolus	Infusion	Next PTT
<20	0	↑4 units/kg	6 hours
20-39.9	0	↑2 units/kg	6 hours
40-60	0	No change	6 hours
60.1-69.9	0	↓2 units/kg	6 hours

Heparin New Bioprosthetic Valve Replacement Protocol

PTT Results (sec.)	Bolus	Infusion	Next PTT
70-80	0 and hold infusion for 1 hour	↓4 units/kg	6 hours
>80	0 and call physician	Stop infusion and call physician	6 hours

Oversight and Responsibility

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

Definitions

1. None

References

1. None

Institute / Department / Committee Involved in Protocol Development / Revision

1. Quality & Patient Safety Institute
2. Heart & Vascular Institute
3. Pulmonary Institute
4. Critical Care Institute
5. Pharmacy Department

Contact for Questions / Clarifications

1. Critical Care Physician
2. Pharmacotherapy Specialist

Related or Supporting Documents

1. [Antithrombotic Therapy Post Cardiac Surgery, CABG, Valve Surgery, LVAD Insertion Procedure](#)

Abbreviations

1. CCAD - Cleveland Clinic Abu Dhabi
2. PTT - Partial Thromboplastin Time