

## Heparin Induced Thrombocytopenia (HIT) Guidelines

Consider HIT in patients experiencing decreased platelet counts after receiving 5 days of heparin /LMWH therapy and one of the following. (Platelet count may decrease much faster if patient previously exposed to heparin within the past 30 days)

- Platelet fall > 50% from baseline
- Development of new arterial or venous thrombus
- Inflammation or skin necrosis at heparin injection site
- Patient with history of HIT or documentation of treatment for heparin induced thrombocytopenia thrombotic syndrome (HITTS)

Initial Assessment and labs:

- Discontinue all heparin/LMWH products (IV, SC, flushes and coated catheters)
- Collect Heparin associated antibody
- Assess baseline hepatic function, CBC, aPTT, INR.

Initiate Treatment for HIT/HITTS

- Argatroban (Direct Thrombin Inhibitor)  
Continuous IV infusion- Initiate at rate of 2mcg/kg/min. Reduce rate to 0.5mcg/kg/min in patient with hepatic insufficiency (Child-Pugh score >6)
- Collect aPTT 2 hours after initiation of therapy and adjust dose according to nomogram to achieve a goal aPTT of 55-80 (1.5-3X baseline)

### *Argatroban nomogram for normal hepatic function*

aPTT	Dosage Adjustment
<30	Increase by 1mcg/kg/min
30-54	Increase by 0.5mcg/kg/min
55-80	No Change
81-100	Decrease by 0.5mcg/kg/min
>100	Hold for 30 min, decrease by 1mcg/kg/min

- Collect aPTT 2 hours after change in infusion rate
- After 2 consecutive aPTTs in target range, collect aPTT daily for duration of therapy
- Monitor CBC daily to assess platelet count and evidence of bleeding

Initiation of Warfarin

- Start warfarin when platelet count returns to > 100,000/uL
- Continue combined therapy with Argatroban and heparin for minimum of 4 days and until the INR is in the desired range

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- Argatroban can cause an elevation in INR beyond that seen with warfarin alone (reversal with vitamin K is not necessary)
  - Collect baseline INR on argatroban prior to initiation of warfarin

#### Argatroban to warfarin conversion guidelines

- Add Warfarin not to exceed 5mg. Continue at least 4 days of combined therapy.
- Collect daily INR
- For INR  $\leq 4$ , continue concomitant therapy and consider increasing warfarin dose
- For INR  $> 4$ , stop argatroban infusion and repeat INR in 4- 6 hours
  - If INR is within therapeutic range ( INR of 2-3), continue warfarin monotherapy
  - If INR is below therapeutic range, resume argatroban combination therapy

Reference: Micromedex, Argatroban Package Insert, Chest Guidelines 2004

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