



May 2022

## Radial/Ulnar Hematoma Protocol

1

### STOP THE BLEEDING!

- If bleeding is noted while TR band is in place, reintroduce air until hemostasis is achieved.
- Leave TR band in place for an additional 30 minutes before attempting to remove air again.



Continued bleeding & Hematoma formation

2

### *Hematoma proximal to the TR band?* THEN:

- Reinflate/redeploy TR band to a max of 18cc's of total air
- If hematoma continues to grow, do not remove TR band & apply manual pressure to the arterial site proximal to the TR band. This should be considered an emergency.

STABLE

MONITOR  
FOR  
REBLED



Continued bleeding

3

- Apply manual pressure cuff on upper arm (please see photo as a guide)
- Inflate to 20mm Hg above patient's SBP for 10 minutes. Apply a clamp to BP cuff tubing to maintain desired pressure.
- Apply an additional Large TR band proximal to the original TR band and inflate with 18cc's of air.
- Place PulseOx on the finger of affected hand to check perfusion
- Expect no pulse oximetry signal when BP cuff is inflated to 20mm Hg above the patient's systolic BP. This means we are effectively controlling the bleeding.
- Firmly apply coban from proximal TR band to the elbow
- Monitor for signs of compartment syndrome (consider ortho/vascular surgery consult if appropriate).



4

- After 10 minutes, deflate the BP cuff and remove the coban.
- Assess hematoma size
- Reapply coban immediately
- Monitor extremity every 10 minutes for any changes
- After one hour of hemostasis remove the coban
- Start deflating both TR bands at the same time as per protocol.

## Specific anti-platelet and anti-coagulant issues:

Agent	Mechanism	Duration	Reversal
<b>Unfractionated heparin (UFH)</b>	Inactivates thrombin; prevents conversion of fibrinogen to fibrin	1-2 hours	Protamine*: Max dose 50 mg IV. Immediate=1 mg protamine/100 unit of UFH 1 hour after UFH =0.5 mg protamine/100 unit of UFH 2 hour after UFH=0.25 mg protamine/100 unit of UFH
<b>Enoxaparin (Lovenox)</b>	Factor Xa inhibition	12 hours; longer if low GFR	Protamine*: 1 mg IV per each mg of enoxaparin (results in 60-75% reversal)
<b>Bivalirudin (Angiomax)</b>	Direct thrombin inhibition	2 hours; longer if low GFR	None
<b>Eptifibatid# (Integrilin)</b>	IIb/IIIa receptor blocker	4 hours	None
<b>Abciximab#</b>	Antibody-mediated IIb/IIIa receptor blockade	0.5 hours, Mild effect for 7 days	None, but platelet transfusion can help reverse effects.
<b>Tirofiban# (Aggrostat)</b>	IIb/IIIa receptor blocker	4 hours	None

\*May rarely cause severe hypersensitivity reaction and hemodynamic collapse. Do not overdose since excess protamine can exacerbate bleeding.

#May cause severe acute thrombocytopenia (especially abciximab)

Consideration	Comment
<b>Urgent Arterial Duplex</b>	Uncontrolled bleeding, presence of pulsatile mass, loss of pulse with new sensory/motor findings of the affected extremity.