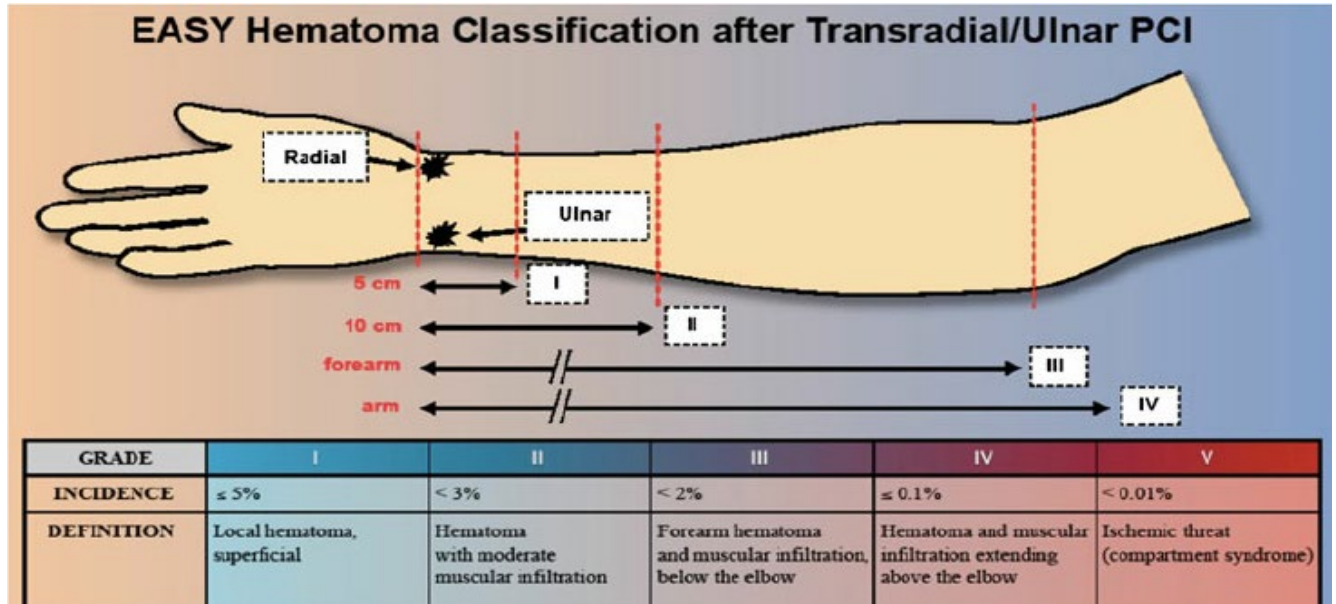


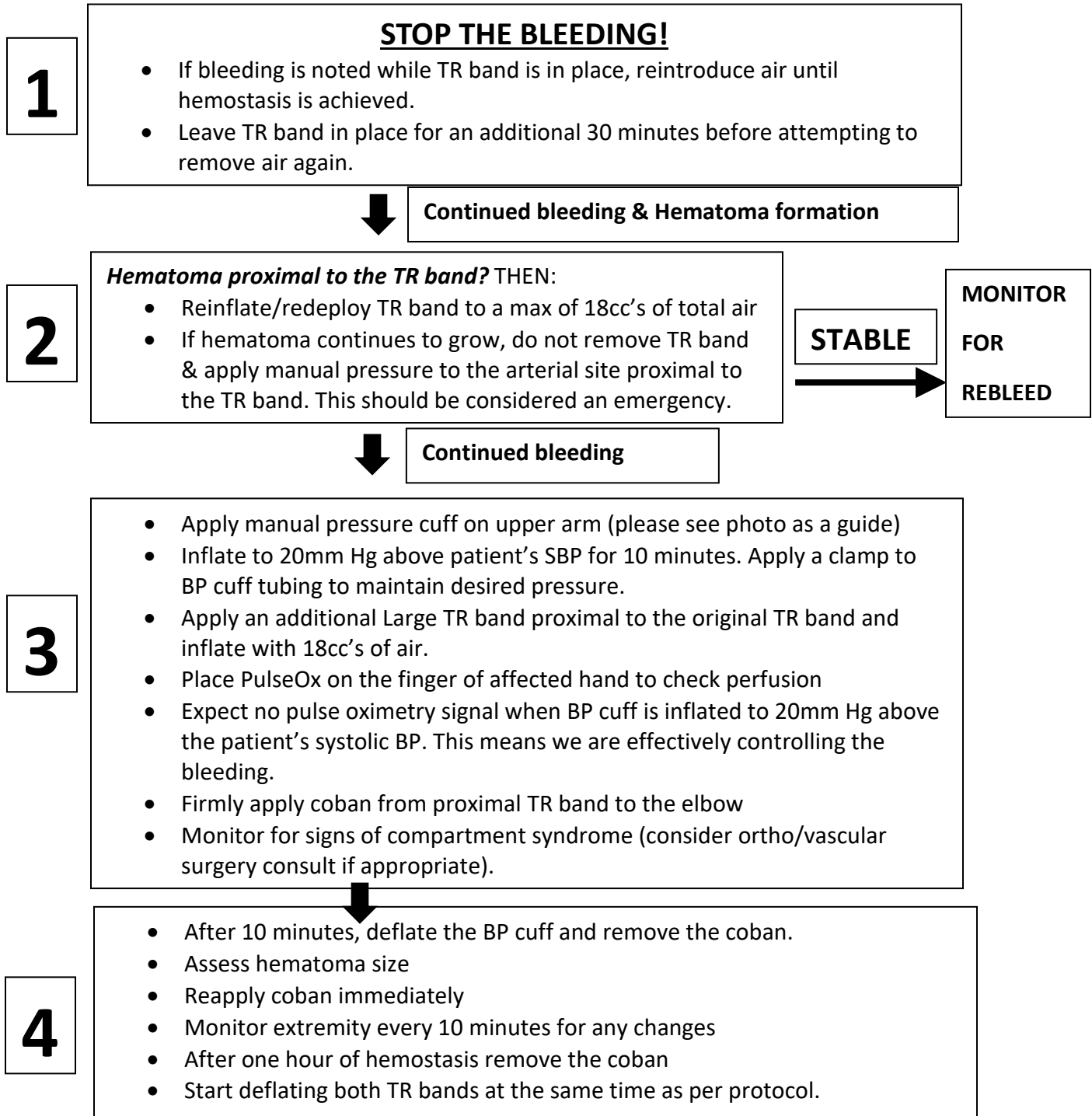
## Management of Radial/Ulnar Access Bleeding & Hematoma





May 2022

## Radial/Ulnar Hematoma 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>Eptifibatide# (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.