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Deaconess REGIONAL TRAUMA CENTER

Vascular Intervention

Purpose: To provide a guideline for the timing of vascular interventions for hemorrhage control

Definition: Confirmed blood pressure is defined as more than one reading.

Guidelines:

A. Solid Organs: See Management of Solid Organ Injuries Guideline
   i. Category A. This equates to a vascular emergency.
      1. Patients requiring a rapid response are those where blood transfusion has been initiated and there is a confirmed blood pressure < 90 mm Hg at any time prior to angioembolization in adults, or age-specific hypotension in children.
      2. Must have an angioembolizable lesion
      3. The procedure should begin within 60 minutes of Trauma Vascular Emergency activation
         a. The response time is tracked from request to arterial puncture
   ii. Category B
      1. Angioembolization should be considered for those patients with an active arterial extravasation on CT or patients with a pseudoaneurysm (i.e., liver, spleen, other) who do not meet the Category A criteria
         a. If intervention is deemed necessary, the timing of such is at the discretion of the surgeon.

B. Non-Solid Organ:
   i. Category A
      1. Patients requiring a rapid response are those where blood transfusion has been initiated and there is a confirmed blood pressure < 90 mm Hg at any time prior to angioembolization in adults, or age-specific hypotension in children.
      2. Must have an angioembolizable lesion
      3. The procedure should begin within 60 minutes of Trauma Vascular Emergency activation
         a. The response time is traced from request to arterial puncture

   ii. Category B
      1. Angioembolization should be considered for those patients with an active arterial extravasation on CT or patients with a

pseudoaneurysm (i.e. liver, spleen, other) who do not meet the Category A criteria

a. If intervention is deemed necessary, the timing of such is at the discretion of the surgeon

References:

- American College of Surgeons (ACS). (2022). *Resources for the Optimal Care of the Injured Patient.*
- ACS TQIP and OTA. (2014). *Best Practices in the Management of Orthopaedic Trauma.*
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