

PRACTICE GUIDELINE

Effective Date: 11-1-16

Manual Reference: **Deaconess Trauma Services**

TITLE: PERIPHERAL VASCULAR TRAUMA

PURPOSE: To provide guidelines for treatment of peripheral vascular injuries

GUIDELINES:

1. Extremity arteriogram or extremity CT angiogram should be obtained in the following situations:
 - a. Any fracture with evidence of poor arterial perfusion.
 - i) Hard signs of poor arterial perfusion
 - Absent pulses
 - Bruit or thrill
 - Active or pulsatile hemorrhage
 - Pulsatile or expanding hematoma
 - Signs of limb ischemia
 - b. Consider if Soft signs of poor arterial perfusion due to injury are present
 - Proximity of injury to vascular structures
 - Major single nerve deficit (e.g. sciatic, femoral, median, ulna or radial)
 - Non-expanding hematoma
 - Reduced pulses
 - Hypotension or moderate blood loss at the scene
 - c. Posterior knee or anterior elbow dislocation (even if spontaneously relocated).
 - d. Penetrating wounds where course of injury is near an artery with hard or soft signs.
 - e. The presence of distal pulses does not necessarily mean that an arterial injury has not occurred.
 - f. Doppler ankle brachial index (ABI) may be helpful.
 - g. Wound proximity to major vessel is not by itself an indication for angiogram.
2. Consider Vascular Surgery consultation if signs of poor arterial perfusion are present
3. Refer to management of musculoskeletal fractures if a fracture is present with poor perfusion for emergency orthopedic consultation

REFERENCES:

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

REVIEWED DATE	REVISED DATE
JAN 17	
JAN 18	
JAN 19	