

Tourniquets should be assessed by a surgeon.

- If bleeding controlled remove
- If bleeding uncontrolled, replace and keep patent until surgery

Extremity Injury Guideline

Patient presents with extremity injury*

Primary survey (ATLS)**

Detailed extremity pulse exam†

Is the injury upper or lower extremity?

Upper Extremity

Lower Extremity

Is the injury at the carpal bones and/or distal?

Yes

No

Consult Hand on call

Is there concern for vascular or nerve injury?*†

Yes

No

Management per Ortho

Obtain x-rays of extremity and consult Ortho**

Yes

No

Is the pulse exam normal†

Obtain ABIs and urgent Ortho and Trauma consult

Extremity assessment by Ortho

Consult Plastics for recommendations or repair assistance

As needed by trauma

Trauma Attending to discuss case with UC vascular surgeon on call 513-475-8263

Are pulses/ABIs normal?

Yes

Reduction and repeat vascular assessment

Yes

Can reduction be performed in the ED?

No

Consult: Trauma to address vascular evaluation

- Consider emergent transfer to UC for multidisciplinary management
- If emergency privileges needed for UC vascular surgeon to come to CCHMC, notify COS on-call

CTA of extremity if indicated

Concern for vascular trauma?

No

Treatment as indicated

*Concerns for torso (chest or abdominal) vascular injury should prompt appropriate level of Trauma Activation.
Vascular injuries distal to the shoulder should consult hand.

**For open fractures also utilize "ED Fractured/Broken Extremity" order set for IV antibiotics.
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† Normal pulse exam:
 • Palpable pulses in extremities
 • Symmetric between extremities (N.B. doppler signals in a extremity without a palpable pulse **are not** normal).