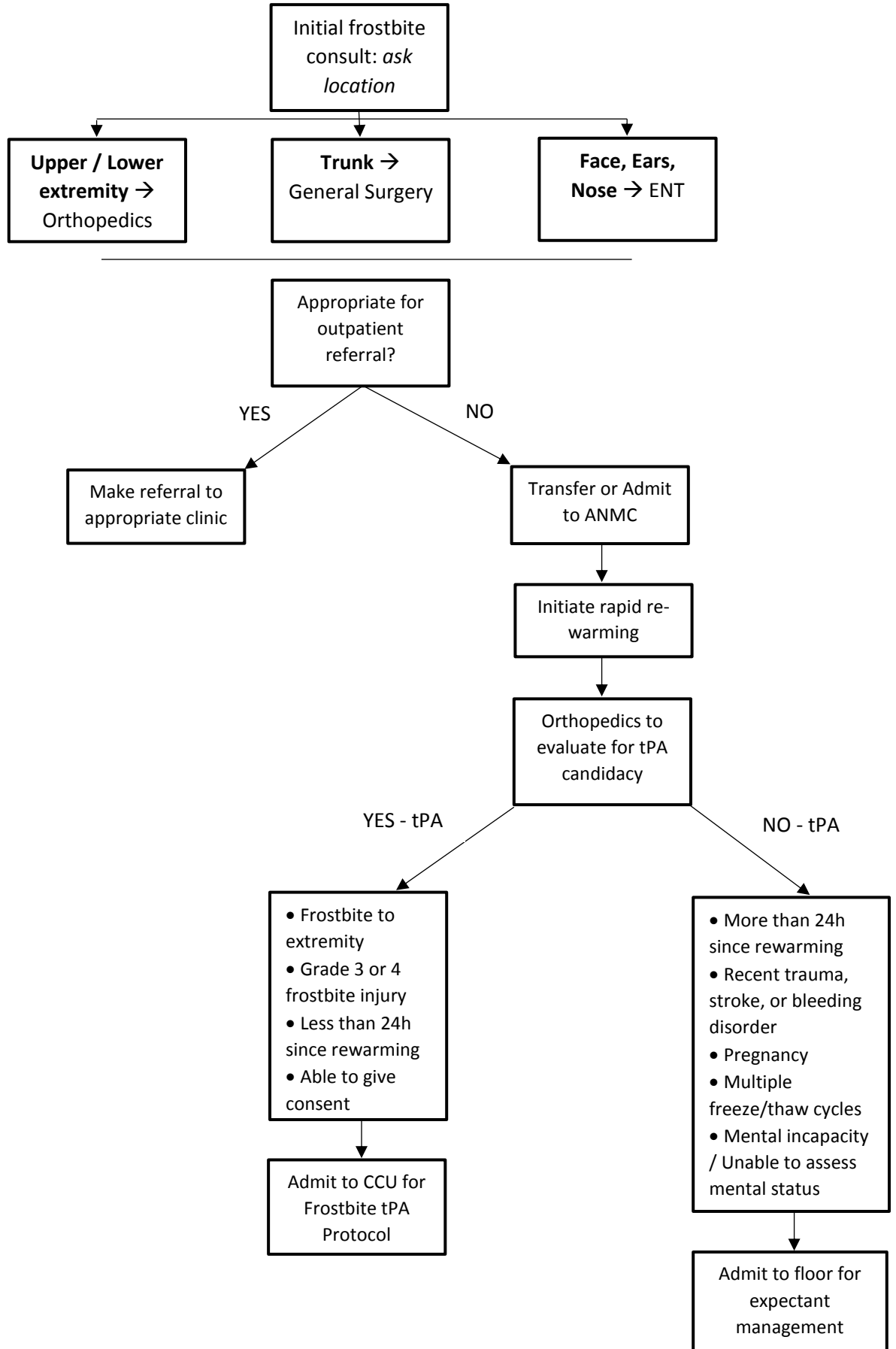


ANMC Frostbite Protocol



ANMC Frostbite Protocol

Treatment in the Emergency Department:

- Rapid re-warming of the affected areas in warm water (between 37° and 39°C) for 20-40 minutes or until thawing complete.
- Administer warm IV fluids.
- Tetanus prophylaxis.
- Wound care performed or directed by appropriate consulting team:
 - o Debridement of clear blisters.
 - o Leave hemorrhagic blisters intact.
 - o Apply aloe vera to blisters.
 - o Dress lightly with padding to allow for ROM. Place gauze or kerlex in between digits to keep spaces dry.
- Pain management:
 - o Rewarming and wound debridement is usually a painful process
 - o Opioids PRN
 - o Consider anesthesia consult for peripheral nerve block/catheter to affected extremity (may be performed post-rewarming; do NOT delay rewarming)
- Document pre- and post-warming images and scan into patient chart.

Inpatient conservative treatment protocol:

- *Admission to surgical service (per location). Internal medicine available to consult if needed due to medical co-morbidities.*
- Elevation of affected extremity
- PT/OT consults
- ROM exercises for affected digits
- NWB on affected areas. Recommend heel stryker shoes or post-op shoes for feet.
- Wound Care:
 - o Topical aloe vera to blisters q6h with dressing changes.
 - o Dress lightly with padding to allow for ROM. Place gauze or kerlex in between digits to keep spaces dry.
- Gabapentin 300mg TID standing
- Ibuprofen 400mg QID standing
- Vitamin C 500mg daily
- Vitamin E 400 IU daily
- Additional analgesia as needed (usually after 2 weeks there is no need for opioid pain medication)
 - o Opioids PRN
 - o Consider anesthesia consult for peripheral nerve block/catheter to affected extremity
- Smoking cessation as applicable
- Pentoxifylline 400mg TID

Discharge planning:

- May discharge when wound care plan established and patient on oral pain medication.
 - o Consider patient housing or medical shelter bed with return to clinic/ED for daily wound care as appropriate.
- Schedule follow-up with appropriate consulting service.

Frostbite tPA Protocol

This protocol is a supplement to our Frostbite Management Protocol at ANMC. Patients who meet criteria will be evaluated by the Orthopedic service for candidacy of tPA protocol. Once a patient has been determined to be eligible for tPA therapy for frostbite treatment, the patient will be admitted by the CCU intensivist on call with Orthopedics as consulting service. Disposition to the floor service will be determined at time of transfer regarding which service will be primary.

tPA infusion protocol for treatment of frostbite:

- tPA bolus: 0.15 mg/kg IV

- Follow bolus with infusion of 0.15mg/kg/h over 6 hours (up to total of 100mg given, including bolus)
 - o Ex: 75kg person: 11.25mg bolus and 11.25 mg/h for 6 hours (78.75mg total)
 - o Ex: 150kg person: 22.5mg bolus and 22.5 mg/h for 3.5 hours (100mg total – max dosage)

- After tPA infusion complete, therapeutic heparin gtt for 72 hours

- After heparin gtt, consider aspirin or coumadin therapy x 4 weeks

*To note: patient must remain in CCU for 24 hours post-tPA infusion for neuro monitoring.