Traction Splint

EMT-Basic
Advanced EMT
Paramedic

PROCEDURE

- ❑ EMT #1: assess circulation and control any hemorrhage.
- ❑ EMT #1: grasp and support the calf just distal to the knee with one hand and leg just proximal to the ankle with the other hand; allow sufficient space for the application of the ankle hitch
- ❑ EMT #1: apply longitudinal traction with sufficient force to restore alignment of the injured thigh
- ❑ EMT #1: maintain manual traction until traction is assumed by the traction splint
- ❑ EMT #2: apply countertraction if needed to assist in restoring alignment of the injured thigh
- ❑ EMT #2: adjust length of the splint to the patient, measuring against the patient's uninjured leg, then lock the splint
- ❑ EMT #2: position the leg support straps on the splint along its length
- ❑ EMT #2: release traction mechanism of the splint and extend the traction strap
- ❑ EMT #2: remove the patient's shoe
- ❑ EMT #2: position the splint under/along the patient's injured extremity
- ❑ EMT #2: Hare traction device – verify that the ischial pad is against the ischial tuberosity
- ❑ EMT #2: position ankle hitch to maintain foot at a right angle to leg when traction is applied
- ❑ EMT #2: secure groin strap
- ❑ EMT #2: attach traction mechanism to the ankle hitch
- ❑ EMT #2: tighten traction mechanism until:
  - a. EMT #1 reports mechanical traction equals manual traction; or
  - b. patient acknowledges pain relief; or
  - c. if capable of measuring – 15 lbs of pressure
- ❑ EMT #2: adjust limb support straps with one proximal to knee, one distal to knee and one proximal to the ankle hitch; secure limb support straps
- ❑ Assess circulation, sensation and movement after splint application and frequently thereafter

REFERENCE GRAPHICS

KEY POINTS

- Apply enough traction to maintain limb alignment (avoid using too much traction)
- Consider pharmacological pain management prior to, or in conjunction with, splinting if possible
- If pediatric traction splint is unavailable, two padded board aplints may be applied
- Ensure there is enough room to shut the rear door for transport

INDICATIONS

- Painful, swollen, deformed mid-thigh injury (including *open* femur fracture)

CONTRAINDICATIONS

- Suspected or confirmed pelvic fracture
- Lower extremity amputation or partial avulsion with bone separation and marginal tissue connection
- Distal lower extremity fractures

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