

Southern Illinois Regional EMS System

DD-10 MUSCULO-SKELETAL INJURIES GUIDELINES FOR SPLINTING

BLS/ILS/ALS

Management:

- Patient Assessment and Initial Care protocol
- Consider spinal immobilization
- Oxygen therapy as appropriate
 - 1-6 LPM by cannula: minimal distress.
 - 12-15 LPM by NRB mask: moderate/severe distress with signs of hypoxia.
 - 15 LPM by BVM: inadequate rate/effort, severe distress, unstable.
- Maintain SpO₂ > 94%
- (ALS / ILS) Initiate IV/IO of NS at 20cc/hr. (TKO)
- Assess pain on a scale of 0-10.
- Assess/document PMS
- Remove jewelry and clothing on/around the affected area
- Contact Medical Control
- (ALS/ILS) Analgesia per Pain Management Protocol
- Attempt to splint the extremity in normal anatomical position by using gentle traction.
 - If resistance is encountered or patient complains of extreme pain:
 - Splint in position found
- If no pulses are present in the affected extremity:
 - Provide gentle manual traction to reposition extremity.
 - Only attempt to reposition the extremity once.
 - If pulse returns:
 - Splint in that position to maintain perfusion.
 - If pulses do not return:
 - Rapid Transport
- Use Hare Traction Splint when indicated.
- Apply cold pack over injury site.
- Immobilize/splint as indicated:
 - If pulses are lost after applying a traction splint:
 - Gently release traction.
 - If no pulse returns:
 - Leave splint in place and transport immediately.
 - Contact Medical Control.
- Elevate extremity injuries if possible after splinting.
- Analgesia only per medical control orders?
 - Proper splinting will promote pain relief.
- Anticipate hypovolemia on long bone fractures:
 - Follow Hypovolemia SOP.
- Contact Medical Control.
- Transport ASAP.
- Save any bony fragments due to open fractures from the scene and treat as an amputated part:
 - See Traumatic Amputation SOP.

Southern Illinois Regional EMS System

DD-10 MUSCULO-SKELETAL INJURIES GUIDELINES FOR SPLINTING

- Guidelines for Splinting:
 - Adequately visualize the injured part.
 - Clothes should be cut off.
 - Check and record distal sensation and circulation before and after splinting.
 - If the extremity is severely angulated and pulses are absent:
 - Apply gentle traction in an attempt to straighten.
 - This traction should never exceed 10 pounds of pressure.
 - If resistance is encountered:
 - Splint the extremity in the angular position.
 - Open wounds should be covered with sterile dressing before applying splints:
 - Splints should always be applied on the side of the extremity away from open wounds to prevent pressure necrosis.
 - Pad the splint well especially if there is any skin defect or bony prominences may press against a hard splint.
 - When there is a life threatening situation:
 - Injuries may be splinted as the patient is being moved.
 - When the injuries are less severe:
 - Splint all injuries before moving the patient.
 - If in doubt, splint a possible injury.
 - Dislocations of elbow, hips, and knees require careful splinting and rapid reduction to prevent severe disability of the affected extremity.