

Treating Fractures, Dislocations, Sprains, and Strains



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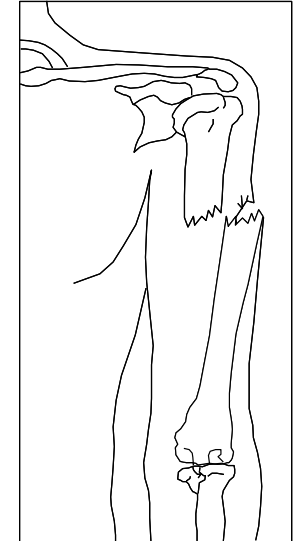
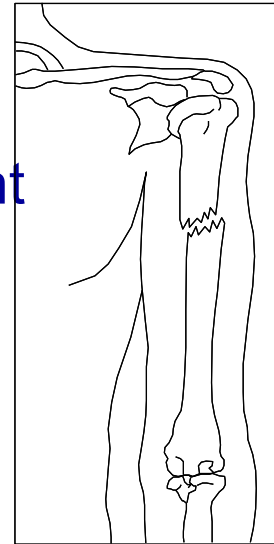
Objectives

- ◆ Immobilize the injury and joints above and below the injury site.
- ◆ If questionable, treat as a fracture.



Fractures

- ◆ A closed fracture is a broken bone with no associated wound. First aid treatment for closed fractures may require only splinting.
- ◆ An open fracture is a broken bone with some kind of wound that allows contaminants to enter into or around the fracture site.



Open fractures are more dangerous because of the risk of severe bleeding and infection. Therefore, they are a higher priority and need to be checked more frequently.

Treating an Open Fractures

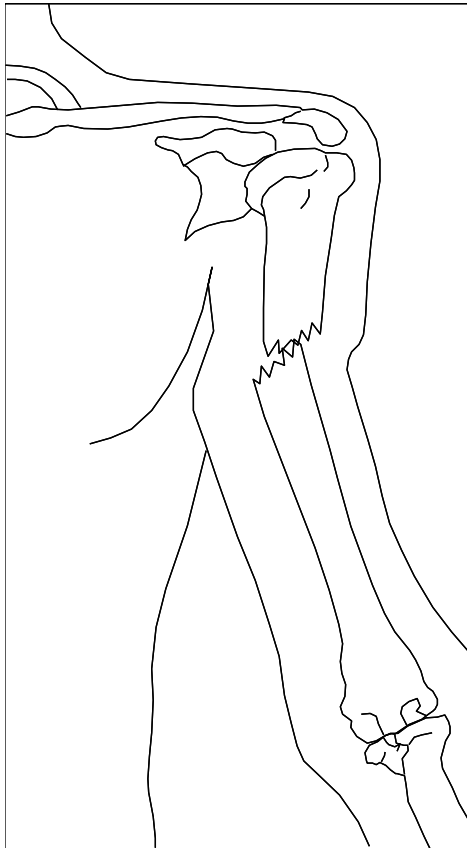
- ◆ Do not draw exposed bones back into tissue.
- ◆ Do not irrigate wound

DO:

- ◆ Cover wound.
- ◆ Splint fracture without disturbing wound.
- ◆ Place a moist 4" x 4" dressing over bone end to prevent drying.



Displaced and Non-displaced Fractures



Displaced fracture in which the fractured bone is no longer aligned.



Non-displaced fracture, in which the fractured bone remains aligned.

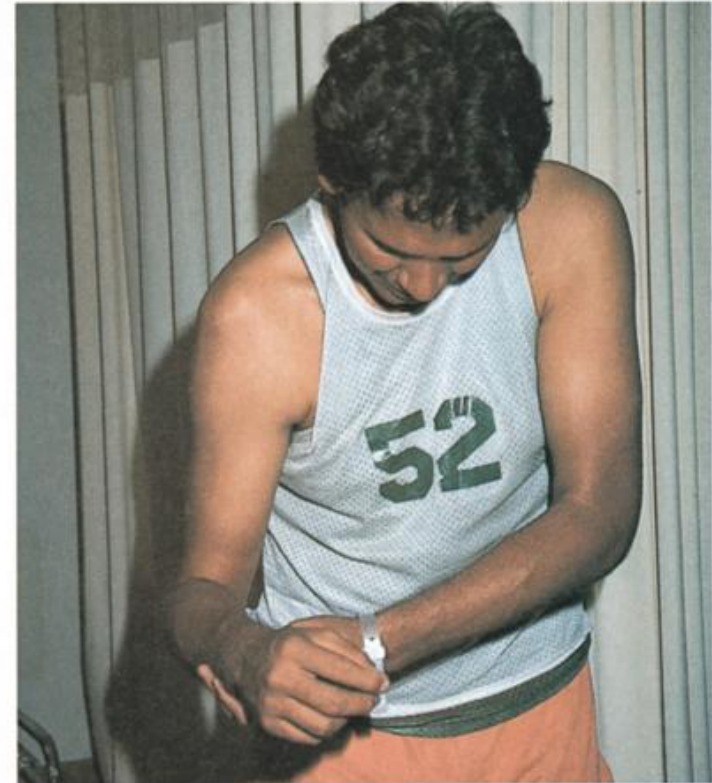
Dislocations

- ◆ Dislocation is an injury to the ligaments around a joint that permits a separation of the bone from its normal position in a joint.
- ◆ Signs of a dislocation are similar to those of a fracture, thus a suspected dislocation should be treated like a fracture.
- ◆ Never not try to relocate a suspected dislocation. They should immobilize the joint until professional medical help is available.



Sprains

- ◆ A sprain involves a stretching or tearing of ligaments at a joint
- ◆ Is usually caused by stretching or extending the joint beyond its normal limits.
- ◆ Is considered a partial dislocation, although the bone either remains in place or is able to fall back into place after the injury.



Signs of Sprain

- ◆ Tenderness at injury site
- ◆ Swelling and/or bruising
- ◆ Restricted use or loss of use
- ◆ Immobilize and elevate.



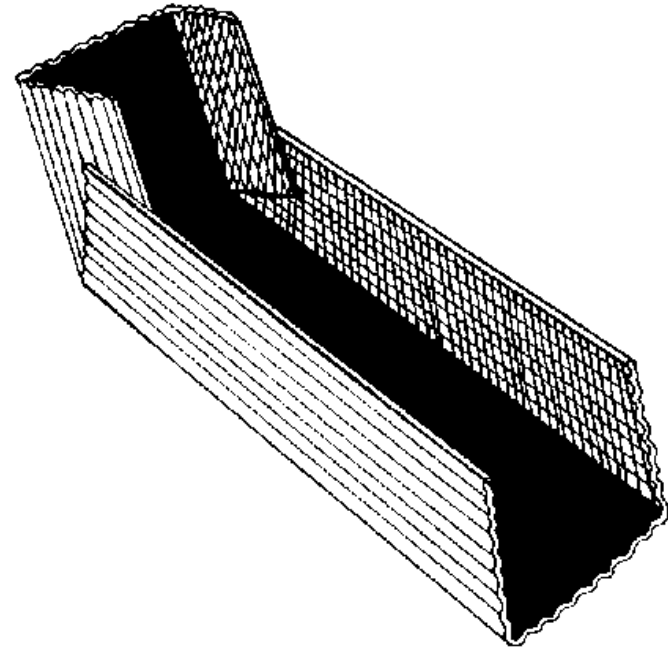
Strains

- ◆ A strain involves a stretching and/or tearing of muscles or tendons.
- ◆ It most often involves the muscles in the neck, back, thigh, or calf.
- ◆ May be difficult to distinguish from sprains or fractures.
- ◆ When uncertain whether an injury is a strain, sprain, or fracture, treat the injury as if it is a fracture.



Splinting

- ◆ Splinting is the most common procedure for immobilizing an injury.
- ◆ Cardboard is the material typically used for “makeshift” splints but a variety of materials can be used, including:

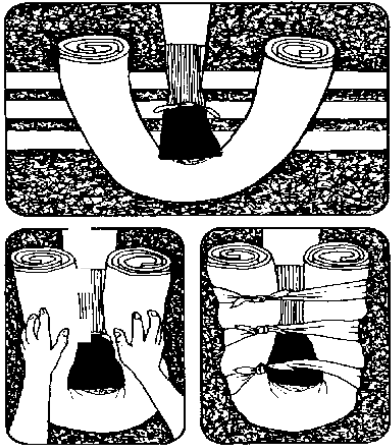


Cardboard Splint

Cardboard Splint in which the edges of the cardboard are turned up to form a “mold” in which the injured limb can rest.

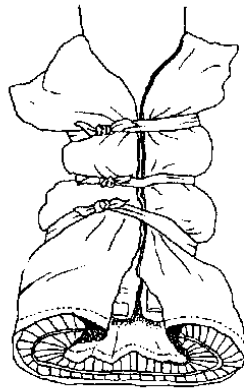
Splinting

Soft materials: Towels, blankets, or pillows, tied with bandaging materials or soft cloths.



Splinting Using a Towel

Splinting using a towel, in which the towel is rolled up and wrapped around the limb, then tied in place.

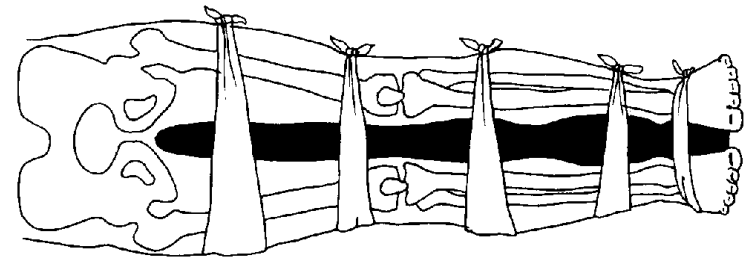


Pillow splint

Pillow splint, in which the pillow is wrapped around the limb and tied.

Splinting

- ◆ Rigid materials. A board, metal strip, folded magazine or newspaper, or other rigid item.
- ◆ Anatomical splints may also be created by securing a fractured bone to an adjacent un-fractured bone.
- ◆ Anatomical splints are usually reserved for fingers and toes but, in an emergency, legs may also be splinted together.



Splinting Using A Blanket
Splinting using a blanket in which the victim's legs are immobilized by tying blankets at intervals from mid-thigh to feet.

Guidelines for Splinting

- ◆ Support the injured area above and below the site of the injury, including the joints.
- ◆ If possible, splint the injury in the position that you find it.
- ◆ Don't try to realign bones or joints.
- ◆ After splinting, check for proper circulation (warmth, feeling, and color).
- ◆ Immobilize above and below the injury.





QUESTIONS?