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BONE/JOINT INJURIES

Definition:

- This is an injury to a bone, a joint, a ligament, or a tendon.
- Joint injuries usually involve a dislocation. This is where the bone has popped out of its socket. This may be accompanied with a fracture, a strain, or a sprain. It may pop back in it may not. Either way seek medical help. Do not push it back into place.
- Tendons are strong tissues that connect a muscle onto a bone. When a tendon tears it is called a strain. When they become torn they take a very long time to heal, many times never as good as before, and sometimes surgery is required to reattach them.
- When a ligament is torn it is called a sprain. Ligaments connect a bone to another bone. These are found around the joints. Ligaments are very strong, but, as with tendons, when they tear they take a long time to heal, never as good as before, and sometimes surgery is required.

Causes:

• Any kind of force that is greater than what the tissue can withhold will cause such an injury. Some common activities include falling, twisting, getting hit, etc.

Prevention:

- Use safety equipment and wear it properly.
- Use seat belts and car seats.
- Keep joints and bones strong through weight bearing physical activities.

Warning signs:

- A 'snapping' noise.
- Pain.
- Deformity.
- Inability to move.
- Swelling.
- Bruising.

Helping:

- Apply the RICE principle.
 - o Rest the injured body part and the entire casualty.
 - o Immobilize the injured body part.
 - o Cold compress over the injury to reduce swelling.
 - o <u>E</u>levate the injured body part if it can be done without causing further injury.
- Seek medical help.
- Do not rub or move the injured body part.
- If there is a protruding bone then bleeding will need to be taken care of by applying indirect pressure.
- Never straighten or realign an injured body part.

Notes:

• Bone fractures, if set properly, will heal fully in a few weeks and will be stronger than before. This happens because the area builds up with more calcification than before.

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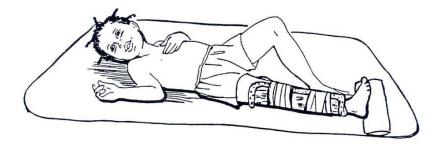
Splints:

• The main purpose of a splint is to keep an injured body part immobilized (e.g. a broken leg). It should only be done if paramedics are going to take a long time arriving, or if you have to move the person. Never move or try to realign the injured body part. Always splint in the position found.

There are three main types of splints:

- 1. Anatomical: this means using a non-injured body part to immobilize an injured body part. E.g. to splint a broken left lower leg you would tie both legs together so the good leg provides support to the injured leg.
- 2. Soft: this means using something like a thick sweat shirt, a jacket, a towel, or a blanket to wrap around and immobilize. This kind of splint works very well with hand or ankle/foot injuries.
- 3. Rigid: this refers to using a firm object, such as a piece of wood, to immobilize. There are many types of rigid splints you can purchase or you can use whatever you see around you e.g. magazines, newspapers, umbrellas, etc.

Splinting the lower leg using a rigid splint.



Splinting and slinging an injured forearm.



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