

5 easy steps to take to ensure proper management of Acute Injuries:

PRRICE PRINCIPLE:

- 1. **Protect** the injured area from further injury. This includes removing the player from the game and supporting the injured area with a sling, tensor, crutches, splint or tape.
- 2. **Rest/Refer** Avoid using the injured area for the first 24-72 hours. This will allow the body's healing process to work more efficiently. If there is any deformity, unrelenting pain, deep ache, redness or altered sensation that develops; **Go to the emergency room for evaluation immediately.** If you are ever in doubt about the injury, **refer** your athlete to be seen by their family physician prior to returning to play or work. Athletic Therapists or Physiotherapists may be utilized for further assessment, rehabilitation and bracing.
- **3. Ice** Apply ice pack to the injury for 15-20 minutes. Repeat every hour for 48 hours. Crushed ice, ice cubes or snow will do the trick. The best method is crushed ice with water in a plastic bag. Place a thin towel between the ice & the skin to protect from irritation. Always place an **injured muscle on a comfortable stretch** to allow muscle to heal in a lengthened position.
- **4. Compression** Apply direct compression to the area in the form of a tensor, tape, or bandaging. Be sure not to wrap the bandaging too tightly or to wear it overnight.
- 5. Elevate the injured body part above the level of the heart and ensure the limb is positioned comfortably.

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- 1. Why Ice?
 - Reduces pain and muscle spasm
 - Decreases metabolic rate in cells
 - Increases vasoconstriction

Therefore, it reduces the acute inflammatory response to an injury.

- 2. Ice Sensations: COLD \Rightarrow BURNING \Rightarrow ACHING \Rightarrow NUMBNESS
 - Time it takes for the 4 sensation changes will vary for different types of tissue:
 - Muscle is a good conductor (Fat is a good insulator)
- 3. The best type of ice is crushed ice and water in a bag.
 - This solution is usually between +1°C and +10°C therefore it is safe to place directly on the skin
 - Water is a great conductor and with the bag being moist it creates good surface contact for effective cooling
- 4. Extent to which tissue is cooled:
 - Type of ice method (i.e., Crushed ice/whirlpool/ice massage)
 - Length of exposure
 - Conductivity of area (type of tissue, muscle vs. fat)
- 5. Amount of time (ice application) depends on:
 - Method Size of Area
 - Type of Area Depth of Target Tissue
- 6. Precautions
 - Using a frozen gel pack directly on skin (place a thin, moist towel down first)
 - Using any type of cryotherapy for longer than 30 min.
 - Male Testes (not longer than 10 min)
 - Children / Elders (poor circulation) <u>Always</u> place ice over a thin towel
 - Ice Allergy / Intolerance Conditions Do Not ice in these cases
 - Any area with compromised circulation
 - Diabetes, some Post-op cases, Raynaud's Phenomenon...

ICE 15-20 minutes on, allow area to re-warm, re-apply...

Always place an injured muscle on a comfortable stretch to allow muscle to heal in a lengthened position. This helps SHORTEN recovery time. Ask a therapist if you do not know the anatomy!!

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