



## Common Kinds of Injuries

DR. SHWETA N. DAVE

PTI

Dharmendrasinhji Arts College, Rajkot

### 1. Injuries to Bones

The 206 bones in the body are also subject to fitness related injury. We will discuss the following injuries to bone bruises, fractures, and stress fractures. Fractures Sometimes the blow to the bone, or the stress upon is so great that the bone actually breaks. Aside from Pain and damage to structure and mobility, broken may cause secondary problems. For example, if not kept immobile, the jagged edges of the broken bone can injure blood vessels, nerves, or other tissues. Further, such secondary damage and any broken skin exposing the body to bacteria can result in infection. Broken bones call for immediate immobility until a physician can set the bone and immobilize it with a plaster cast. Depending on the nature, severity, and location of the break, traction may be necessary, Healing can take anywhere from 1 to 6 months.

### 2. Stress Fractures

Sometimes called a fatigue fracture, a stress fracture is a small crack on the surface of the bone that can be recognized by the pain when it is pressed on both from above and from below. Other injuries will usually pain only when pressed from above or below, but not both. Stress fractures are difficult to diagnose because even Radius; ulna

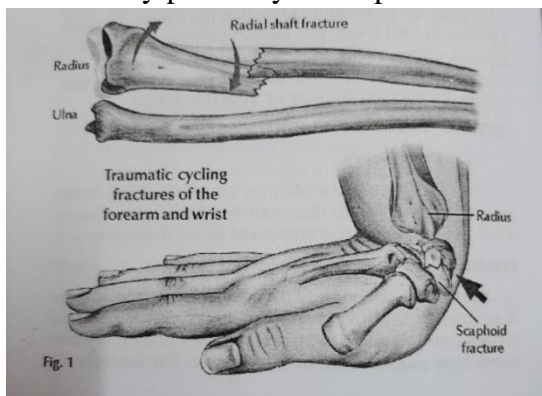


Figure 1

X rays do not always pick them up. Treatment involves an interesting observation has bone been made regarding stress fractures and athletes. Runners have been found to experience menorrhoea the cause in greater of this numbers condition than is still women benign satiated, but one result of amenorrhoea is a decrease Oestrogen produced by the body. Decreased estrogen if duction results in a weakening of the bones, and that postmenopausal woman are more susceptible to broken bones.

calcium in their diets to strengthen their bones. If you find yourself in this situation, drink milk, and eat yogurt, cheese, or other foods high in calcium. Much has been written on amenorrhoea and the physically active female, and you should consult that literature if you need more information on the topic. Bone Bruises A blow to a bone can be quite painful, but often not very serious. Some blood vessels may be ruptured, Rising skin discoloration, and some pain may linger. However, application of ice and a few dais's rest is usually all that is needed. Injuries to Muscles are located throughout your body. they are connected to your bones be tendons and when they contract, muscles are responsible for your ability to move any body part. Sometimes muscles are injured as a result of physical activity. The most common injuries are muscle pulls and muscle cramps.

### 3. Muscle Cramps

A muscle cramp is an involuntary sustained contraction of the muscle that may be caused by a mineral deficiency, an injury to the muscle, or an insufficient supply of blood to the area to remove buildup waste products. One common form of muscle cramp is a stitch; a sharp pain, usually on the sides of the

upper abdomen. It is believed that this is a cramping of the diaphragm, which controls breathing. Stitches can be prevented by not eating just before exercising. Once they happen, exercise should stop. Place the palm of your hand over the stitch, and exhale several breaths. When the pain stops, you can resume exercising. For other muscle cramps, rest and a more mine rally nutritious diet is the best treatment.

#### **4. Muscle Pulls**

A muscle pull is a stretch, tear, or rip in the muscle and is properly known as a muscle strain. Muscle pulls may be a result of insufficient warm-up, imbalance in muscle strength, poor flexibility, mineral imbalance caused by a great deal of sweating or faulty diet, or overtraining. When a muscle pull occurs, a sharp pain will be felt, and any further movement of that part of the body will hurt. When touched, that muscle will hurt, and there may be some spasms visible. To treat a muscle pull, apply ice immediately, compress the muscles with an elastic and elevate the body part. This treatment will amount of swelling and speed recovery. Some hours to increase the blood supply to the muscle, d consequently nutrients to and transportation of {lilids from the area. Others recommend ice throughout. Physical activity involving that area of the body can usually begin where from two days to two weeks and should be ed by the pain start slowly and stop if you egerience pain.

#### **5. Injuries to the Skin**

Injuries to the skin are usually more bothersome than serious, and yet they can limit physical activity. The skin injuries we will discuss are haematomas, "jock itch," "athlete's foot," blisters, and abrasions.

#### **6. Blisters**

The constant rubbing of soft skin can cause a blister. What is occurring is a separation of the outer layer of skin from the next layer, with fluid accumulating between the layers. To prevent blisters, apply tincture of benzoin followed by talcum powder to protect the skin, or wear something soft between the skin and what it will rub against. Once the blister occurs, cut out a nut shaped bandage to separate the blister from anything it might rub against.

Some people recommend puncturing the blister to drain the fluid. However, puncturing introduces the possibility of infection and should be done only to prevent tearing of the blister. When puncturing a blister is necessary, use a sterile needle applied to one edge of the blister and apply a pressure bandage to prevent refilling of fluid. The application of antiseptic to the blister prior to securing the pressure bandage is recommended.

#### **7. Jock Itch**

The red, flaky rash that develops on the inner skin of the upper thighs is usually the result of a fungus infection s irritated by warm weather, excessive perspiration, or heating wet underclothes. "Jock itch" can be quite uncomfortable. Several measures can be taken to prevent this condition: drying well after bathing; wearing loose, clean, day clothing; and the liberal use of talcum powder. Once jock itch occurs, an antifungal cream should be applied to kill the fungus.

#### **8. Abrasions**

When the skin is scraped against a rough surface and the epidermis and dermis are worn away, the result is known as an abrasion. Small blood vessels are usually ruptured, resulting in minor bleeding and the possibility of infection. Abrasions should be treated by cleansing the area with soap and water; applying an antiseptic and a petroleum-based ointment; and covering with a sterile, non-adhering bandage. The bandage should be changed each day.

### **9. Hematomas**

A hematoma is a collection of blood pooled in a particular area as a result of a blow to that area. The treatment for a hematoma includes an ice pack applied immediately, a pressure bandage, and keeping the part immobilized and elevated. After several days, heat should be used to encourage absorption of the blood. In some instances, where the pooled blood is extensive or creating pressure on adjacent structures, aspiration by 227 ways be required. In most instances, however, edle this is unnecessary.

### **10. Athlete's Foot**

The extreme itching on the soles of the feet and between the toes is known as athlete's foot. Its medical is tinea pedis. Athlete's foot is caused by a fungus that thrives in a warm, moist, dark environment. To prevent this condition in the first place, talcum powder should be applied to the feet twice daily; the feet should be thoroughly dried after showering; shoes and socks should be kept dry by liberal use of talcum powder; and clean socks should be worn. Once athlete's foot develops, use talcum powder frequently, wear clean socks, and use a talcum powder frequently, wear clean socks, and use a fungicide.

### **11. Injuries Connective Tissue**

Tendons connect muscle to bone. Ligaments connect bone to bone to limit movement is the joint. Cartilage surrounds the ends of the bones at the joint to prevent bones from rubbing against one another. All these are connective tissues, and all can be inured in physical activity. Common injuries are tendonitis, Achilles tendon rupture, shin splints, sprained ankle, water on the knee, plantar fascia strain, and tennis elbow.

### **12. Shin Splints**

The term shin splints are used to refer to several conditions, but generally means pain in the shin region of the leg. There is usually an inflammation of the 'tendon or muscle in that area. The exact causes of shin splints are not known, but an educated guess involves Kfaulty posture alignment, falling arches, muscle fatigue, overuse stress, body chemical imbalance lack of proper reciprocal muscle coordination betw the anther anterior and posterior aspects of the leg"een To treat shin splints, some experts recommend taking two aspirins and applying ice to the region prior to exercising or gradual stretching before and after exercising. Heat applied at other than times of exercise has also been recommended. Taping of the shin may

### **13. Water on the Knee**

Medically known as bursitis, water on the knee usually results from trauma to the knee. When the knee is hit, the bursa may become inflamed, and an excess of fluid may develop. Treatment includes removal of fluid by syringe, local injection of corticoid, protection against being bumped, and wrapping of the knee with an elastic bandage. In addition, aspirin and warm compresses to reduce the inflammation have been recommended.

### **14. Tendonitis**

Tendonitis is an inflammation of a tendon that results is swelling and pain. The pain of tendonitis is worse when not exercising, since the muscle to which the tendon is attached is not stretched and creates a greater pull on the tendon. Since exercise actually relieves the pain of tendonitis, the tendency is to continue exercising, with the result often being a worsening of the condition.

Tendonitis, most common in the Achilles tendon, requires rest, with stretching of the muscle to which the tendon is attached only when the pains subsides. Applying ice to the tendon after exercise to decrease the inflammation is also recommended.

### 15. Tennis Elbow

This condition is common in tennis players, but can result from any twisting of the elbow joint. Baseball pitchers throwing curve balls and tennis players using topspins are prone to this injury.

Tennis elbow is inflammation and/or tears in the muscle attachment just above the elbow joint. The elbow joint is painful and hurts, especially when touched or accidentally bumped. In tennis players, this condition may be caused by "too large or too small a racket grip, racket strings either too tight or too loose or an improper stroke, particularly the backhand..., playing too much tennis too early in the season or playing significantly more tennis in a day than one normally plays.

### 16. Achilles tendon Rupture

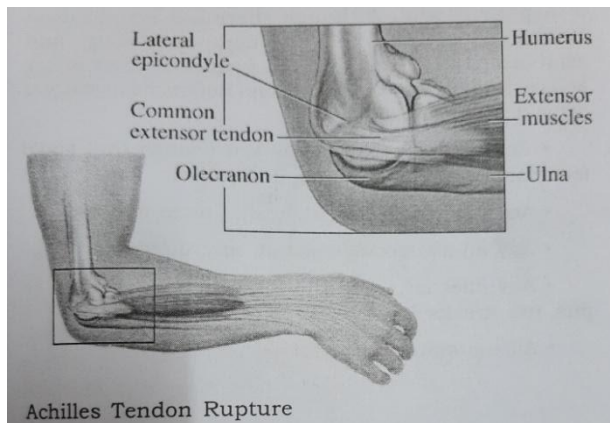


Figure 2

Occasionally the pull on the tendon will be so great or the condition of the tendon so deteriorated that it will actually rupture. As with tendonitis, the most likely tendon to rupture is the Achilles tendon. If the rupture is complete, surgery is usually required; if it is not complete, immobilization in a cast for several weeks may be all that is necessary.

### 17. Care of Common Injuries

In spite of what we do to prevent injuries, it seems that they are inevitable. We can decrease the probability of acquiring an injury or its severity when it does occur, but sooner or later all active people will be injured. IN this section, for some of the

common injuries we will describe what to do once you are injured.

When to See a Professional A first and major consideration once an injury occurs is whether to treat it yourself or to seek the help of a professional. Although there are no absolute guidelines regarding this question—each injury and each person is slightly different from each other injury and each other person—Mir kin and Hoffman suggest you consult professionals for:

- Any injury that concerns you enough that you'd feel more comfortable having it checked.
- Any injury that doesn't heal in three weeks.
- Any injury accompanied by severe pain.
- Any infection in or under the skin manifested by pus, red streaks, swollen lymph nodes, or fever.
- All traumatic joint injuries.