



## **FIRST AID – CONTUSIONS**

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- A contusion, or bruise, is caused by an object striking the body with enough force to crush the tissues beneath the skin. The greater the force of the blow, the greater the tissue damage. If the blow is over a bony area, the bone also may be contused.

A contusion causes varying amounts of swelling and disability, directly related to the force of the blow and its location. A contusion damages tissue cells and capillaries. This results in blood and waste products leaking into the area around the cells. These blood and waste products gradually travel to the skin, producing the characteristic “black and blue mark” of a contusion. Because of gravity, the “black and blue mark” may appear below the actual contusion.

When there is a lot of damage, large amounts of blood and waste products are produced. They may collect in a pool instead of dispersing throughout the tissue. This is a hematoma. Hematomas commonly form following a severe contusion to the thigh. Blood loss can be severe and may result in shock. If you suspect a hematoma, remove the athlete from all activity immediately.

As mentioned above, bone can also be contused. When this happens, swelling occurs between the covering of the bone, the periosteum, and the bone itself. Due to limited circulation, swelling decreases very slowly, and the contusion remains very tender for an extended period of time.

### ***TREATMENT***

- Treatment for contusions is the same as for other injuries and can be remembered by the acronym **PRICE: protection, rest, ice, compression, and elevation**. The athlete should be removed from activity, and the injured area cooled, compressed, and elevated as soon as possible to minimize damage to uninjured tissue. Do not permit the athlete to try to “run off” a contusion as the muscle activity may increase the bleeding in the contused area.

Athletes with minor contusions can often return to activity very quickly. Serious contusions may impair an athlete for months. An accurate assessment of the seriousness of a contusion is beyond the scope of a non-medical person. However, if the athlete can use the injured body part with full strength and can move it through a full range of motion with little or no discomfort, it is probably safe to return.

**WHEN IN DOUBT, DO NOT PERMIT AN ATHLETE TO RETURN TO PLAY. AN ERROR IN JUDGEMENT MAY COMPLICATE A SIMPLE INJURY.**

### ***PROTECTION***

- After a contusion, the injured area must be protected from further trauma. The use of additional pads or pads with a different design can provide this protection. For example, an athlete who repeatedly falls should wear knee pads. Football players may wear additional or larger pads. Sometimes, custom pads are made to protect a contused area, but this should be done by a medical professional. Not only do custom-made pads protect the injured athlete, but they are also designed to pose no threat to other athletes.

Obviously, the best treatment is prevention of the contusion in the first place. Sport-specific protective equipment should be appropriately sized, fitted to every athlete, and worn at all times. Protective equipment that is either too small or too large is not effective.

It is the responsibility of the coach to ensure all athletes wear required protective equipment that fits properly and is in good condition. Equipment left in the locker does not do any good. Also, the fit and condition of protective equipment should be checked regularly. Improperly sized or worn-out equipment provides little or no protection and gives athletes a false sense of security.