Ski and Snowboard Injuries

Skiing and snowboarding are among the most popular winter sports. Injuries to the upper extremity occur in a relatively predictable pattern. Fortunately, there are some ways to help decrease the chance for injury.

Skiing Injury

The most common upper extremity skiing injury is to a thumb ligament called the ulnar collateral ligament (UCL) of the metacarpophalangeal joint. It is the ligament on the inner aspect of the thumb at the second joint from the thumb tip (see Figure 1). A ligament is the soft tissue that connects bones to bones. The injury occurs when the ski pole does not release from the hand and the pole places a bending stress to the thumb (see Figure 2). If you fall while skiing and your inner thumb hurts, it may be from a "skier's thumb," or UCL injury, and you should see a hand surgeon. Your surgeon will determine whether it is a partial or complete ligament tear. A partial tear is usually treated with a cast or splint, whereas a complete tear is treated with surgery to repair the ligament since the torn end of the ligament often gets trapped behind a muscle.

The chance of getting a "skier's thumb" injury may be decreased by NOT using your ski pole strap around your wrist. Using ski poles without platforms or saber handles decreases your chance of injury. The main goal is that you want the ski poles to release from your hands when you fall. If the ski pole stays in your hand throughout your fall, the pole can act as a long lever arm to put a large stress load on the thumb joint. If you fall, it is better to lose your poles and protect your thumbs.

Snowboarding Injury

The most common snowboarding injury is to the wrist. This may be in the form of a fracture (broken bone), dislocation, and/or ligament injury. This usually occurs when the rider falls backwards or forwards and puts his or her hands out in front of himself or herself to brace the fall (see Figure 3). If you have this injury, your doctor should examine your wrist and possibly get more studies such as x-rays and/or an MRI or CT scan. Depending on the positions of the bones and the integrity of the ligaments, treatment may consist of a splint, cast, or even surgery. Occasionally special devices are needed such as metal pins, plates, screws, or a combination of devices to stabilize wrist fractures and/or ligament injuries.

The chance of suffering a snowboard wrist injury may be decreased by using wrist guards or gloves that have guards built into them. There are medical studies that have shown such protective gear to be effective at decreasing the potential for injury. Regarding protective gear, helmets have also been shown to decrease head injury and their use should be encouraged.





