# **Sports Injuries**



### **Rowing**

#### What are the causes of rowing injuries?

Most rowing injuries are caused by overuse. Any abrupt changes in training level, technique, or the type of boat rowed and a rapid increase in training volume contribute to their occurrence. Most rowing overuse injuries affect the wrist and forearm, rib cage, knee, and lumbar spine.

## What are the most common rowing injuries and how are they treated and prevented?

#### Extensor Tenosynovitis of the Wrist

Extensor tenosynovitis commonly occurs in early spring with the return to high-intensity rowing in relatively cold weather. This condition is associated with pain, swelling, and crepitus (a sense of creaking) with motion of the wrist.

Treatment involves the use of a cock-up wrist splint when not rowing, anti-inflammatory medication, and ice. Local cortisone steroid injections may be helpful. The key to prevention is keeping the hand and wrist as warm as possible while rowing.

#### Rib Stress Fractures

The vast majority of rib injuries are stress fractures at the junction of the middle and back one-third of the rib. Rib stress fractures generally occur during periods of intense training in the winter and early spring when rowers spend a significant amount of time on the rowing ergometer, with a low stroke rate and high load per stroke.

Rib stress fractures typically present with achiness of the chest wall before progressing to a painful stress fracture. Recognizing the onset and decreasing the intensity of training may prevent the progression to an acute fracture.

Initial treatment involves stopping activities until the athlete is comfortable with performing daily living activities. This is followed by cross-training on a stationary or spinning bike. As the fracture heals, ergometer training is allowed at a high stroke rate and low resistance with progression to rowing on the water with a decreased load on the oar.

Prevention involves incorporating core and upperback strengthening exercises as part the regular training program and avoiding long, high-load ergometer training pieces.



#### Low Back Pain

Many rowers experience pain in the lower back, the second-most common site injured in the collegiate rowing population. For collegiate rowers, back pain is associated with ergometer pieces of greater than 30 minutes and lifting free weights.

Most rowers with disc injuries do well with conservative management by stopping rowing and cross-training when tolerated. Flexibility exercises and a core stabilization program should be started and continued as long as the athlete is rowing. Prevention of back pain in the rower requires a comprehensive core stabilization and flexibility program.

#### Knee Pain

Patellofemoral (kneecap) pain generally presents with pain while ascending or descending stairs and a clicking sensation during rowing. Treatment consists of anti-inflammatory medication and a stretching program of the anterior hip, quadriceps, and iliotibial band.

Iliotibial band (ITB) friction syndrome is also fairly common in rowers. The ITB glides across the outside of the knee with knee bending. If the ITB is tight, it may result in inflammation and localized pain. Treatment for ITB friction syndrome consists of active rest, ice, anti-inflammatories, ultrasound, and stretching.

Always be sure to speak with your athletic trainer and physician if you are experiencing any type of pain, and remember not to play through the pain.