



What's In a Wrist?

Types of Injury and Methods of Prevention

Wrist Joint Sprain

The wrist joints can be sprained if relatively large forces are applied to the wrist when the wrist is in an awkward position, typically when the wrist is extended. Examples are lifting a heavy binder with one hand during which the wrist is forced into extension to balance the weight of the book; placing full body weight on the hand with the wrist extended when stapling; or pushing against an object with the wrist extended.

Prevention

Avoid large forces to the wrist especially when the wrist is extended. Whenever possible, try to keep the wrists straight during activity. Use two hands to lift relatively heavy objects such as full binders. Use of two hands helps distribute the load and results in increased control of wrist position.

Tendonitis/Tenosynovitis

Tendonitis is inflammation of a tendon. Tenosynovitis is inflammation of a tendon sheath. Both can occur if the tendon is used excessively, especially when the wrist is in an awkward position. Initially irritation of a tendon occurs over a localized area. If the irritation continues, inflammation of the tendon can spread along the tendon sheaths resulting in symptoms into the forearm and/or hand.

Prevention

Assess wrist position during activity. Avoid excessive wrist flexion or extension during activity. Avoid rapid changes in work load and/or activity. Remember that the body will adapt to a given work load if it is given adequate time to adapt. When beginning a new activity, limit the amount of new activity for a given session. Try to vary activities as much as possible to alter the type of stresses. Realize that the body can become de-conditioned during an extended leave of absence such as a long vacation, sick leave or maternity leave. Upon return, increase activity gradually.

Carpal Tunnel Syndrome

Carpal Tunnel Syndrome is diagnosed when compression within the carpal tunnel is sufficient to cause damage to the median nerve. Typical symptoms of Carpal Tunnel Syndrome include pain, tingling and/or numbness of portions of the wrist and hand. It is possible to have symptoms which mimic Carpal Tunnel Syndrome if inflammation within the carpal tunnel is sufficient to compromise the space within the carpal tunnel. Typically carpal tunnel type symptoms resulting from injury to the wrist (e.g. wrist sprain or tendonitis) resolve with treatment of the injury and do not result in Carpal Tunnel Syndrome.

Prevention

Resolve wrist sprains, tendonitis or tenosynovitis quickly through proper care. If you smoke, stop. Smoking has been identified as a risk factor for Carpal Tunnel Syndrome. Assess your wrist position during activity and at night. Avoid excessive wrist flexion or extension during activity and avoid wrist flexion at night.

Steps to Take if Symptoms Arise

If symptoms are severe, seek medical advice immediately. Often symptoms come on gradually, but even minor symptoms should not be ignored. Early recognition of a problem and following steps 1-5 below can prevent symptoms from getting worse and will dramatically shorten treatment time.

1. Assess your activity level and make adjustments as needed. Have you increased your activity too quickly? Have you added a new activity? Back off on activities which aggravate the symptoms.
2. Assess your wrist position during activity and make adjustments as needed. Look at activities at work and home since it is important to look at the overall stress the body.
3. During the initial phase of symptoms, you can apply ice and take an anti-inflammatory such as ibuprofen, ketoprofen, or naprosyn to control inflammation.
4. If symptoms last more than 3-4 days, seek medical advice.
5. If you have specific questions regarding your work station, ask your supervisor or contact EH&S for an ergonomic evaluation.