Carpal Tunnel Syndrome (CTS)

**Definition:** Carpal tunnel syndrome is a condition where the median nerve in the wrist is compressed.

**Common Terms:** Carpal tunnel syndrome; CTS; nerve entrapment.

**Typical Mechanism of Injury:** Activities that involve repeated motions of the wrist, such as typing can lead to CTS. In addition, trauma or other injury that causes swelling in the wrist can lead to pressure being placed on the nerve. When the nerve is compressed, it does not work effectively.

**Common Signs and Symptoms:** Numbness, tingling, pain and weakness are common symptoms associated with CTS. Individuals will often complain of difficulty in performing simple tasks like holding a coffee mug without dropping it, squeezing objects with the tips of the fingers, and not being able to feel differences in temperature, like when holding a cold compress or hot plate.

**Common Treatment:** CTS can be treated with rest, immobilization (using a brace), and anti-inflammatory medications for swelling (pills or cortisone injections). Different types of braces can help to minimize excessive and repetitive movements of the wrist while still allowing individuals to return to activities over a period of time. In some cases, these treatments do not work, and surgery may be necessary. Surgery for this condition involves taking pressure off of the compressed nerve and is usually very successful.

**Prevention:** Avoiding positions or activities that put pressure on the wrist and forearm may help prevent CTS. Proper body-mechanics or positioning of the hand and wrist is very important, especially if your job or activity involves repetitive movements. Frequent rest breaks may also assist in minimizing swelling to the area.

**Expectations:** Most individuals have excellent outcomes once treated for this condition. Depending upon the severity and stage of the compression on the nerve full recovery may take several weeks to many months.