

ARTICLE 12/18/16

“Ulnar neuropathy—A Variety of Causes”

This week we are going to discuss the neuropathic changes of the ulnar nerve in the elbow and some possible causes of this condition. One of the most common causes of nerve damage of the ulnar nerve at the elbow is cubital tunnel syndrome.

This is a compression and teathering of the ulnar nerve as it crosses the elbow. The nerve itself is teathered to a channel in the elbow which is designed to keep the nerve tracking away from other structures as the elbow flexes and extends. When the nerve becomes entrapped, teathered or for other reasons rubs on the bone of the elbow as it flexes the nerve can become irritated. Some symptoms of ulnar entrapment at the elbow include pins and needles, numbness, and burning in the 4th and 5th fingers (ring and pinky fingers) as well as on the ulnar side of the forearm (pinky side). The symptoms are often problematic at night and can be irritated with flexion (bending) of the elbow. The entrapment of the ulnar nerve at the elbow can be successfully treated through night splinting, using a splint which does not allow the elbow to flex at night decreasing irritation of the nerve. Additionally, release of the nerve (ulnar nerve release/relocation) can decrease the teathering force or rubbing of the nerve decreasing symptoms surgically.

Another cause of ulnar neuropathic change at the elbow is in the example of a baseball player. Pitchers who throw side arm pitching often repetitively stretch the ulnar collateral ligaments and as such the ligament gradually stretches out to the point that the elbow becomes unstable. This force on the elbow laterally causes increased tension on the ulnar nerve and the result is an ulnar neuropathy. The ulnar nerve becomes stretched and is repetitively teathered due to the side arm throwing mechanics. Treatment includes improving the pitcher’s throwing mechanics, rest, tightening of the ulnar collateral ligaments (Tommy John’s surgery) and specific rehabilitation post operatively. As you can see throwing side arm as a pitcher is not something which should be practiced as it is a sure way to irritate and possibly ruin the elbow as well as the ulnar nerve at the elbow.

As you can see side arm throwing and ulnar nerve entrapment at the elbow (cubital tunnel syndrome) are two significantly problematic issues for the ulnar nerve at the elbow. Protecting the nerve as it glides and slides across this bony joint during elbow motion is of utmost importance and knowing how and when to protect the nerve is equally important. Recognizing the symptoms of ulnar neuropathy is useful and seeing a physician as soon as symptoms arise is of utmost importance for prevention.

For more information on ulnar entrapment and side arm pitching injuries, please feel free to call the clinic to schedule a no cost consultation. Thank you