**WHAT IS TENNIS ELBOW?**

The medical name for Tennis Elbow is Lateral Epicondylitis of the humerus. Lateral means “on the side” and refers to that area of the elbow away from the body. The humerus is the large, upper arm bone and has rounded, bony protrusions on both sides of the elbow that are called epicondyles. The muscles that extend or straighten the wrist and fingers derive the origin in part from the lateral epicondyle. Lateral Epicondylitis of the humerus (Tennis Elbow) refers to a degenerative or traumatic tear of these tendon origins at their attachment to the bone, causing pain on the outside of the elbow. When this injury does not heal normally, it becomes a chronic condition. It is not an inflammatory condition.

**WHAT ARE THE CAUSES?**

Tennis Elbow is often caused by repeated strain on the muscles of the forearm that extend the wrist and fingers. Activities that involve repeated twisting or extension of the wrist during work or hobbies may strain the muscle attachment at the bone on the outside of the elbow.

In addition, carrying or pulling a heavy load with the elbow extended and the palm towards the floor may also cause a tear in the tendon origins in this area that fails to heal. Most often, tennis elbow reflects an aging process occurring around or after age 40 when repair capability diminishes. In rare instances, a direct blow to the elbow may cause this condition. The tear or degeneration of these tendon origins from bone causes pain or tenderness in this region.

Your physician may want to rule out other possible causes of pain in this area. These causes may include arthritis of the elbow, a shoulder problem, or pressure on the radial nerve in the region of the elbow which is called Radial Tunnel Syndrome. X-rays may also assist the physician in ruling out other potential sources of pain to the elbow.

**WHAT ARE THE SYMPTOMS?**

Examination of the affected elbow will usually reveal tenderness and discomfort when pressure is applied to this area. In the early stages, pain may only be experienced with sudden, forceful activities involving grasping, pulling, or carrying objects with the elbow extended.

**HOW IS IT TREATED?**

The type of treatment will depend upon the severity and length of time the condition has been present. Initial treatment of Tennis Elbow involves limiting the activities in which the muscles and tissues of this region may be stressed. Often, this is accomplished by use of a splint which immobilizes the wrist in extension.

Use of a counter force brace or air cast (sometimes referred to as a “Tennis Elbow band”) may be used to provide localized pressure on the forearm muscle and give support to the area.

**WHEN IS SURGERY NECESSARY?**

In cases where conservative treatment is not effective, surgery may be recommended. Surgery is usually performed on an outpatient basis by arthroscopy or through a short incision. During surgery, an incision is made on the outside of the elbow, and the surgeon will explore the tendon origin, and take appropriate steps to remove any degenerative tissue. It may be necessary to release (cut) the tendon at its attachment to the bone. At times, a small portion of the underlying bone is removed to improve blood supply to the area. The surgeon may also explore the area for possible nerve compression or damage to the elbow joint itself.
PREVENTING RECURRENCE
Following surgery, the wrist and elbow may be immobilized by the use of a bulky dressing or splint for 2 to 6 weeks. Range of motion exercises are prescribed on an individual basis, followed by exercises designed to strengthen the muscles of this region. Depending on the patient’s progress with strengthening, unrestricted use of the arm is usually possible at 3 months following surgery.

It may be necessary to alter daily activities, especially avoiding those activities involving repeated or prolonged grasping with the elbow straight, high force pulling, or carrying of objects with the palm down. If work activities demand these type of motion, it may be necessary to change the way these tasks are performed.

When playing racquet sports, careful consideration should be given to proper grip size, the composite of the racquet, as well as the size of the racquet’s “sweet spot.” Continuation of the prescribed flexibility and strengthening exercises is also important in preventing recurrence of injury.