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**Knee, Shoulder, Elbow Surgery** 



## PATIENT NOTES – TENNIS ELBOW

## **Injury Description:**

Tennis elbow is basically an inflammation of the tissues in the elbow area. It plagues many racquet players and golfers, both amateur and professional. While it is most common in these sports, the problem can occur with anyone who uses the arm excessively and is most common between the ages of 35 and 55 years.

Tennis elbow involves the muscles and tendons that extend (bend back) the wrist and fingers. Quite a large group of muscles originate from a very small area of the bone. The problem usually begins when the forces exerted by the muscle become greater than the strength of the muscle itself. Typically the pain occurs on the outside of the elbow. Similar symptoms can occur on the inside of the elbow which is known as medial epicondylitis or golfer's elbow.

## **Predisposing Factors:**

- 1. Overuse of the arm, such as playing excessively or repetitive movements of the arm.
- 2. Muscle imbalance and/or weak muscles.
- 3. Improper equipment this usually aggravates the condition such as incorrect grip size or too tight racquet strings.

#### **Treatment:**

The mainstays of treatment are rest, ice and stretching. In addition to these, physiotherapy, medications, braces, injections and/or surgery may be required. If the precipitating cause of the tennis elbow is avoided, then treatment usually lasts about three months.

#### Rest:

Continuing activity while experiencing pain aggravates the condition. It is best not to use the arm for anything while it is painful. Use pain as your guide and very rarely the arm may require a sling for a short period of time.

### Ice:

Ice the elbow at least three times a day for fifteen minutes each time in the early painful stage. This involves using a block of ice to deeply massage the area (for example a Styrofoam cup filled with water and kept in the freezer). Also ice the elbow after any activity using the arm.

#### Stretching:

Stretching the inflamed area will break down any scar tissue that develops with inflammation and hopefully will prevent further scar tissue from forming.

#### **Physiotherapy:**

This has several phases. Initially, the physiotherapist will reduce the inflammation in your arm and later on move on to strengthening the muscles, both to protect the inflamed area and to prevent the injury from happening again. The programme will start with eccentric exercises and progress to concentric strengthening prior to returning to your previous activity level.

#### **Medication:**

Anti-inflammatory tablets are a useful part of the treatment. They may be prescribed for you if you are able to tolerate them.

#### **Brace:**

The brace is designed to relieve the pressure on the inflamed tendon and initially it is worn almost full time. As the arm improves it is worn only for activities using the arm. Several braces have been designed and different designs work more effectively for some people than others. All of the effective ones encircle the upper part of the forearm firmly and stop the muscles from contracting fully.

## **Injections:**

A localised injection of local anaesthetic and corticosteroid is a supplement to other treatments. It can make physiotherapy more effective and acts as an anti-inflammatory measure. **Sport should be avoided for one to two weeks after the injection**. Side effects include the possibility of a local change in skin colour or formation of a dimple from fat necrosis.

If these fail then a technique taking blood from one arm and injecting it into the painful area of the other arm is often effective at curing the condition (known as autologous blood injection).

#### **Exercises:**

Stretches and exercise may cause pain in the very early stages and should be avoided, but *long term they strengthen the muscles to prevent further tendon damage*.

#### **Sports:**

Initially you may have to refrain from racquet sports or repetitive work activities altogether. The initial period of rest is critical in the healing process and return to sport should only take place after modification of equipment.

When you go back to your sport, it is worthwhile going back in stages. Initially rally only for short periods of time and avoid the shots which cause a problem. Slowly increase the frequency and intensity of the play and do not play competitive games until your elbow is healed. Make sure you warm up very well before you play.

<u>The stroke:</u> Backhand is the main culprit, but serving and overhead smashing may also cause problems. Two handed backhand tends to be easier on the elbow and lessons to modify your stroke may be necessary.

<u>The racquet</u>: The three main factors are grip size, racquet weight and string tension. Typically, the new oversize and composite racquets are much easier on the arm and this combined with the racquet being restrung at a lower tension, often solves the problem.

#### **Surgery:**

Surgery is rarely required unless the condition has been present for more than twelve months. Surgery is very effective at relieving the pain of tennis elbow, however, almost all patients are left with a minor residual weakness in the surgically released arm. Return to sport can be delayed for 3 to 6 months following the surgery. Minor recurrences of symptoms are common but are usually much less severe than before the operation.

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