WHAT IS ULNAR NERVE SYNDROME?
(Tardy Ulnar Palsy)

ULNAR NERVE SYNDROME is where the nerve that runs around the elbow to the hand is compressed.

This nerve is called the Ulnar nerve.

The nerve runs under a ligament around the elbow in a place commonly known as the Funny Bone (medial epicondyle). This ligament binds the nerve to the bone of the elbow and forms a tunnel for the nerve to run underneath.

The nerve is travelling from the upper part of the arm down to the fingers. It runs from the back of the arm (near your triceps muscle) into the inside of the forearm (under some muscles) to the hand.

It has two major functions in the hand.

1. It supplies the sensation to part of the hand (little finger and half ring finger) and
2. Impulses to drive some of the muscles in the hand.

It also supplies some of the muscles in the forearm but these are not usually affected.

WHAT CAUSES IT?

1. Thickening of the ligament over the nerve.
2. Thickening of the muscle the nerve runs into after leaving the fascial tunnel.
3. Hormone disorders such as acromegaly or diabetes.
4. Repetitive trauma to the nerve.
5. Often there is no specific cause.
WHAT ARE THE COMMON SYMPTOMS?

1. Numbness in the little finger and typically half of the ring finger.
2. Symptoms worse with some activity.
3. Weakness in some functions of the hand (such as spreading out the fingers). The grip may decrease and there is a tendency to drop things.
4. Pain is not usually a feature.

WHAT OPERATIONS IS PERFORMED?

The operation is called a Ulnar Nerve Decompression. It can either be performed under a local or general anaesthetic. You may be admitted as a day patient and go home after the operation or be admitted the day before.

HOW DO YOU DIAGNOSE ULNAR NERVE SYNDROME?

Your local doctor will usually make the diagnosis based on your symptoms. He may send you for special electrical tests on the nerves in your arm called Nerve Conduction Studies. If the nerve is affected then it takes longer for the impulses to cross the elbow and they are dampened as they cross. The test will confirm the diagnosis.

If he does not send you for the test he will send you to a neurologist or a Neurosurgeon for an opinion. The Neurosurgeon sends you to a Neurologist to perform the test.

The other causes of similar symptoms may be:
1. Compression of the 8th cervical nerve and or the 1st thoracic nerve in the neck.
2. Pressure on the nerves in the neck just above the first thoracic rib (called Thoracic Outlet Syndrome)

WHAT ARE THE REASONS FOR HAVING AN OPERATION?

The commonest reason is that the symptoms in your hand have been causing significant discomfort or that you have been getting worse.

Usually non-operative therapy has failed.

HOW DO WE TREAT THIS?

In most cases if you stop doing the things that aggravate the palsy the hand will get better on its own.

The common things causing the hand to get worse are repetitive trauma (banging or resting on the elbow).

Anti inflammatory medication can help in the short term.

Physiotherapy or hand exercises can be useful.

If your symptoms are mild we do not always do any tests and wait to see if they improve spontaneously. If they do not improve the next procedure is to confirm the compression with electrical tests.

The strength often gets better before the numbness.

Typically the hand will recover on its own. This may require an alteration in the type of work that you do.