

## **WORK RELATED UPPER LIMB CONDITIONS**

### 1. What is a work related upper limb condition?

There is a number of conditions which can in some circumstance be attributed to certain types of occupation. Some of these are recognised by the Department of Work and Pensions as being caused through particular working practices and these conditions are Industrially Prescribed. These include;

- I. PDA4 Task specific dystonia eg writers cramp caused for example by prolonged periods of hand writing or use of the computer key board.
- II. PDA5 Subcutaneous cellulitis of the hand for example caused by manual workers using shovels and picks for long periods
- III. PDA6/7 Bursitis or subcutaneous cellulitis arising about the knee or elbow usually caused by prolonged kneeling or pressure on the elbow.
- IV. PDA8 Traumatic inflammation of the tendons of the hand or forearm or the associated tendon sheaths viz Tenosynovitis. This is caused by the frequent or repetitive movement of the hand or wrist for example in assembly work or packing.
- V. PDA11 Vibration white finger/Hand arm vibration syndrome. This results in periodic blanching of the skin especially on exposure to the cold. Also reduction of sensory perception in the hand and loss of manipulative dexterity numbness. These conditions are caused

through the repetitive use of hand held vibrating tools in grinding or polishing, chain saws or the use of percussive tools eg road drills

- VI. PDA12 Carpal tunnel syndrome caused by vibrating hand held tools or repeated flexion and extension of the wrist for at least 20 hours per week amounting in aggregate to at least 12 months in a 24 month period prior to the onset of symptoms. Repeated means more often than every 30 seconds.

2. Are there other condition which might have a work related cause

Yes-but these are controversial. There are differences of opinion among experts as to whether a particular condition is work related or not.

3. What are these other conditions

- I. Tennis elbow. A condition which results in pain over the outer side of the elbow in the vicinity of the Common Extensor Origin. If it occurs on the inside of the elbow (Common Flexor Origin) it is known as Golfers Elbow. These are common conditions which are not generally accepted as being work related. Many experts will argue that the conditions are caused through naturally occurring degeneration of the tendons. There is however a body of opinion which feels that if the job involves a great deal of gripping and if the job is heavy and forceful there may be a causal relationship. Cases have been successfully argued through the courts
- II. Repetitive strain injury (RSI). This is a condition usually found in young adults. The complaint is usually pain which is non-specific and poorly localised. There is usually a paucity of abnormal clinical

findings. The pain can affect the whole of the limb. Trigger points may be present. There are no pathological tests which help to provide a diagnosis and all imaging modalities are normal. It is usually caused by and aggravated by work. Repetitive work sustained posture and/or forceful movement may be causative.

III. De Quervains stenosing tenovaginitis. Pain on the radial border of the wrist associated with a swelling which is very tender are the hallmarks of this condition which can affect working and non-working people alike. The condition causes very severe pain and is often poorly diagnosed. It is caused by pathological narrowing of the tendon sheath through which run the tendons of Abductor Pollicis Longus and Extensor Pollicis Brevis. Because the condition is called Tenovaginitis or Tenosynovitis it is often attributed to work. This is usually not the case as the condition is usually constitutional. It may have a work related cause if the particular job requires a lot of gripping movement with the thumb and side to side movement of the wrist.

IV. Trigger finger. This has the same pathological causation as DeQuervains. There is little epidemiological evidence that it is caused through a particular working practice although unaccustomed gripping of a hand tool e.g. secateurs over a prolonged period can cause the condition acutely.

V. Conditions of the shoulder. Impingement syndrome, rotator cuff tendonitis, acute calcific tendonitis, sub-acromial bursitis are not industrially prescribed conditions and should be looked at on an individual basis. The Health and Safety Executive identify awkward posture as a causative factor in several of these conditions. Workers

who have to work with their arms over their heads for long periods are susceptible to shoulder problems.

4. Do these conditions have anything in common

The Health and Safety Executive has identified three factors which in combination may result in a work related upper limb condition. These are;

- I. Repetitive movement
- II. Abnormal posture
- III The application of undue force