

## **Diseases due to overstraining of the muscular and tendonous insertions**

### **Definition of causal agent**

#### Lateral and medial epicondylitis, biceps tendonitis:

Prolonged periods of forceful and repetitive arm movements.

#### Supraspinatus tendonitis:

Prolonged periods of forceful and repetitive arm and shoulder movements.

Prolonged periods of work with the arms elevated more than 50-60 degrees.

#### ***Main occupational uses and sources of exposure:***

Repetitive and forceful hand use, e.g. in meat cutting, fish filleting, machine feeding, manual assembly, use of hand-held tools.

Washing and painting of ceilings, mounting fittings, pipes etc. below the ceiling

### **Definition**

Lateral epicondylitis (tennis elbow): Inflammation of the extensor tendons at the lateral epicondyle.

Medial epicondylitis (golf elbow): Inflammation of the flexor tendons at the medial epicondyle.

Biceps tendonitis: Inflammation of the long biceps tendon in the shoulder (the intertubercular sulcus of the humerus).

Supraspinatus tendonitis: Inflammation or degeneration of the supraspinatus tendon in the shoulder (the major tubercle of the humerus).

### ***Diagnostic criteria***

Pain in the affected tendon.

Clinical signs: Palpation tenderness of the affected tendon. Local pain elicited when the tendon is activated, e.g. in resisted extension or flexion of the wrist or resisted abduction in the shoulder.

### ***Exposure criteria:***

*Minimum intensity of exposure:* Individual exposure anamnesis with confirmation of prolonged occupational exposure to forceful and repetitive arm motions and/or prolonged periods of work with the arms elevated.

Measurements of repetition at the work place (e.g. number of items handled, no. of hand repetitions), assessment of force exerted (e.g. handled weights) and percent of the work time with the arms elevated may add valuable information although threshold limits for exposure are not established.

Highly repetitive procedures (guiding): More than 10 items handled/minute or more than 20 repetitions/minute. High force (guiding): More than 1 kg. handled weights. Arm elevation (guiding): Arms elevated more than 50-60 degrees more than 50% of the work time.

*Minimum duration of exposure:* Days

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*Maximum latent period:* A few days

*Induction period:* Days