

Diseases due to overstraining of the tendon sheaths

Definition of causal agent

Prolonged periods of highly repetitive hand movements. The use of force and awkward position of the hand are aggravating factors.

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.

Definition

Tenosynovitis: Inflammation of the flexor and extensor tendon synovial sheaths in the hand.

Diagnostic criteria

Pain in the dorsal and/or palmar aspect of the wrist.

Clinical signs: Palpation tenderness of the affected tendon sheaths. Pain elicited when the tendons are activated, e.g. in resisted extension or flexion of the wrist. In the acute phase swelling, redness, warmth, crepitation may be found.

Exposure criteria:

Minimum intensity of exposure: Individual exposure history with confirmation of prolonged occupational exposure to highly repetitive hand motions. Working with the wrists/hands in awkward positions and /or using hand force aggravates the exposure.

Measurements of repetition at the work place (e.g. number of items handled, no. of hand repetitions), assessment of time spent in awkward positions of wrist/hand and assessment of force exerted (e.g. handled weights, applied forces) may add valuable information although threshold limits for exposure are not established.

Highly repetitive procedures (guiding): >10 items handled/minute or >20 repetitions/minute. High force (guiding): >1 kg. handled weights.

Minimum duration of exposure: Days

Maximum latent period: A few days

Induction period: Days