

## Diabetic Hand Syndrome

A hand therapist is a registered occupational therapist or physiotherapist who specialises in the rehabilitation of patients with conditions affecting the hands and upper limb. A hand therapist often works alongside hand surgeons, planning and implementing post-operative care in order to hasten patients' recovery following surgery.

**British Association of Hand Therapists**

### Prevention and Treatment

In an ideal world it would be best to prevent these conditions from affecting you by having good control of your blood sugars all the time.

This is easier said than done when so many factors can affect the blood sugars of anyone with diabetes.

Treatment of these conditions and disorders may include stretching and strengthening exercises for the hands, or resting of the affected limb or digit, with warm or cold compression.

Wearing of the correct splints for each condition may be of benefit also.

Some times pain relief such as ibuprofen and paracetamol may be advised and corticosteroids maybe prescribed by your G.P. Steroid injections are also a treatment used in the treatment of some of these conditions and in chronic/severe cases surgery can be used to return the hand to full function.



### The most common known complications of diabetes are the issues that affect the eyes feet and nerves etc.

But diabetes can affect the muscles and joints of your hands too. While they are not life-threatening, they can have a big impact on quality of life. Musculoskeletal disorders of the hands related to diabetes, are thought to be caused by high blood sugars which change the amount and character of the protein and collagen in the tissues, which connect and separate the skin, muscles and tendons of the hand leading to damage of small blood vessels.

Three hand conditions associated with diabetes are:

#### **Stiff Hand Syndrome:** Also known as **cheiroaropathy**.

This is a painless stiffness that usually spreads from the little finger across to the thumb, caused by an increase in collagen in and below the skin of the hands. As a result it will become difficult to fully extend the fingers. Tight, thick, waxy skin may form on the back of the hand.

If you put your hands in the prayer position (palms together) and you can not make all of your hand touch its corresponding opposite, this could be a sign you have stiff hand syndrome.

#### **Dupuytren's Contracture:**

This is also attributed to increased collagen.

Most often the ring and/or little finger are affected.

Tendons become unable to glide over one another properly and become shortened. Fingers are pulled into the hand, making it difficult/ impossible to open your hand fully.

A locking sensation in one or more fingers (usually index and middle) can be an early symptom and is a condition called **Tenosynovitis** "trigger finger".

#### **Carpal Tunnel Syndrome:**

CTS is generally associated with repetitive use and stress of the hands, but it occurs more frequently in people with diabetes than the general public.

The Carpal Tunnel is a small structure in the wrist through which the median nerve travels, and is surrounded by a band of ligaments.

Any prolonged stress on this area or thickening of this band increases pressure on the median nerve. Symptoms of CTS are numbness and tingling in the thumb, index, middle, and ring fingers, occasionally the little finger also. Leaving your hand feeling like it is sleeping. Changes in collagen and nerves often occur at night, so symptoms may be most noticeable then.

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