

HAND, WRIST & UPPER LIMB SURGERY

“I can’t open up my hand!”

Dupuytren’s Contracture is a disorder of the hand that causes fingers to become bent and stiff. Learn more about its risk factors, diagnosis and treatment options.



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What is Dupuytren’s (pronounced du-pwe-TRANZ) Contracture?

Dupuytren’s Contracture is a hand deformity due to abnormal thickening and shortening of the fibrous tissue beneath the skin in the palm. This thickening may extend to the fingers — it usually affects the little and ring fingers and, sometimes, the middle finger. These tight inflexible bands, called cords, cause the fingers to curl inwards to the palm.

Dupuytren’s Contracture typically progresses gradually. Over months and years, it causes a loss of movement. In severe cases, the affected fingers cannot be straightened completely, which can interfere with everyday activities.

The condition can make it difficult to perform certain functions and motions, such as fully opening the hand, putting the hands into gloves or pockets, or washing the face, shaking hands and grasping items. The thumb and index finger are not usually affected, so fine motor activities such as writing are not usually a problem.

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What causes it and who is at risk?

The cause for Dupuytren's Contracture is unknown. It is more common in people of Northern European descent, and often runs in families. Known risk factors include age, gender, as well as family history.

Dupuytren's Contracture affects both sexes, but is more common in men. Most cases occur in men over the age of 50 and women over 60. Smoking, high alcohol consumption and diabetes are also associated with increased risk. It occasionally appears after injury to the hand or wrist, or after surgery in these areas.

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What are its symptoms?

The condition typically begins as a nodule in the palm of the hand. This nodule may be sensitive to pressure, but is not usually painful. As it progresses, the skin on the palm may take on a puckered or dimpled look. The nodule may extend to form cords that pull the affected finger towards the palm, preventing it from straightening fully.

As it can become a crippling hand deformity, it is important to seek advice from your doctor if you spot any of the symptoms. Early diagnosis, treatment and monitoring can help slow the progress of the disease.

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How is it diagnosed?

Your doctor will do an examination and look for the distinctive puckering on the skin of the palm. He or she will also check for nodules and cords in the hand. You may be asked to lay your hand flat on a table top — an inability to fully lay the hand flat is an indication of the severity of Dupuytren's Contracture. Other mobility tests may also be performed to assess the dexterity of the hand.

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What are the treatment options?


In mild cases — especially if hand function is good — where disease progression is slow, causes no pain and has little impact on everyday tasks, treatment may not be needed but monitoring is recommended.

If the condition is more severe, various treatment options are available. However, complete correction may not always happen, and the disease may come back.

- **Needling** A needle is inserted into the palm under a local anaesthetic to puncture and weaken the cords. The cords of tissue are then ruptured. Tearing of the overlying skin, or injury to the nerve or tendon may occur.

- **Enzyme injections** These injections help to soften the tough, fibrous cords so that your doctor can break them and straighten the fingers as in the needling technique above.

- **Surgery** In advanced cases, the tough cords are surgically removed, resulting in a more complete and longer-lasting release compared to non-invasive treatments. There is, however, a longer recovery period. After surgery, splinting and hand therapy are often required. Injury to the nerve, haematoma formation, and skin healing problems are some complications encountered.

- **Anti-inflammatory medication** If the nodule in the palm is sensitive and painful, a steroid injection can relieve painful symptoms. Excision biopsy should be done if the diagnosis is uncertain. 

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