1 Care map information

Quick info:
Scope:
• initial assessment of the patient with Dupuytren's contracture
• surgical and non-surgical management of Dupuytren’s contracture in adults
Out of scope:
• the diagnosis or management of other disorders of the hand
• treatment of children and adolescents
Definition [1]:
• Dupuytren’s contracture is a disease which affects the fascia complex of the palm of the hand
• it is characterised by abnormal fibroblast proliferation and collagen deposition which form thickenings, nodules and ultimately
cords that distort the normal fascia of the hand
• contraction of the fibrous cords (which resemble tendons) pulls the joints of the fingers towards the palm, impairing normal hand
function
References:
Please see the care map’s Provenance.

2 Information resources for patients and carers

Quick info:
Recommended resources for patients and carers, produced by organisations certified by The Information Standard:
• ‘Dupuytren's contracture’ (PDF) from Patient UK at http://www.patient.co.uk
• ‘Dupuytren's contracture surgery (fasciectomy)’ (URL) from Bupa at http://www.bupa.co.uk
• ‘Dupuytren's disease’ (URL) from Bupa at http://www.bupa.co.uk
For details on how these resources are identified, please see Map of Medicine’s document on Information Resources for Patients
and Carers (URL).

3 Updates to this care map

Quick info:
Local pathway enhanced by wording from international map: Date of publication: 31-Jan-2012

4 Dupuytren's contracture - clinical presentation

Quick info:
Dupuytren’s contracture typically presents with some of the following [2]:
• skin thickening or pitting on the palm
• firm nodules that are fixed to the skin and deep fascia of the palm or fingers:
  • commonly near the distal crease of the palm, in line with the ring or little finger
  • can occur anywhere in the palm or fingers
  • nodules can be painful in the early stages due to local inflammation, this subsides as the disease progresses
• fibrous, tendon-like cords
• contractures of the cords:
  • flexion deformity at the metacarpophalangeal and proximal interphalangeal joints
  • confirmed if the person is unable to lay their palm and fingers flat on a table top
• both hands are usually affected
• if one hand is affected, it is usually the right side, regardless of dominance
• the ring finger is most commonly affected, followed by little and middle fingers
5 History

Quick info:
Establish the following:

- the patient's age [3]
- left or right handedness [3]
- patient's profession [3]
- which digits are involved [3]
- whether hand symptoms interfere with normal daily activities [3]
- location and duration of any symptoms in the hand or fingers, such as [3]:
  - joint stiffness
  - stiffness, locking or loss of motion of finger joints, eg flexion, extension
  - inflammation or swelling, pain and tenderness (not usually associated with Dupuytren's contracture and are only present if there is co-morbid tenosynovitis)
- whether there has been any recent or past trauma to the hand [3]
- whether there is a history of [3]:
  - diabetes
  - rheumatoid arthritis
  - alcoholism
  - smoking
  - hypercholesterolaemia
- a family history of Dupuytren's contracture [3]
- stiffness, inflammation, or pain in joints other than the hand [3]
- symptoms of diabetes – consider checking fasting blood glucose [2]
- alcohol consumption [2]
- smoking status [2]

References:
Please see the care map's Provenance.

6 Examination

Quick info:
Physical examination:

- assess the hand for [3]:
  - which digits are involved
  - flexion contracture of thumb or fingers
  - puckering and pitting of palm skin
  - visible palm cords proximal to the nodules
  - firm palpable nodules, eg at the distal palmar crease overlying the metacarpophalangeal (MCP) joint
  - any inflammation, pain or tenderness on palpation
  - thickened and tender knuckle pads over the proximal interphalangeal (PIP) joint (Garrod's knuckle pads)
  - assess functional ability of hand
- test to see if the person can lay their palm and fingers completely flat on a table top [2]
- examine other areas of the body for ectopic disease including [3]:

References:
Please see the care map's Provenance.
Dupuytren's contracture - assessment (PLCV)

7 Diagnosis
Quick info:
Dupuytren’s contracture [3]:
- diagnosis is clinical and is based on the patient’s history and physical examination
- X-rays or other investigations are not usually necessary
- referral to specialist for confirmation of diagnosis is not usually required, consider referral for hand surgery if hand function is compromised

References:
Please see the care map's Provenance.

8 Consider differential diagnoses
Quick info:
Differential diagnoses for Dupuytren’s contracture include [2]:
- callus:
  - most common differential diagnosis
  - a thickened area of skin
- ganglion cyst:
  - most common benign tumour of the hand
  - fluid-containing mass
  - usually attached to a tendon sheath, or connected with an underlying joint
  - located distal to the distal palmar crease
- giant cell tumour of the tendon sheath:
  - benign tumour of the hand
  - painless soft tissue mass arising from the tendon sheath
  - typically presents in people age 30-50 years
  - women are more commonly affected than men (gender ratio 3:2)
- ulnar nerve palsy:
  - ulnar nerve pressure can cause:
    - clawing of the fourth and fifth finger
    - paraesthesia of the hand
    - wasting of the small muscles of the hand
- stenosing tenosynovitis (trigger finger):
  - painful nodule in the flexor tendon at the entrance to a stenosed tendon sheath
  - affected finger may lock in flexion, but can usually be fully extended
  - commonly seen in women older than age 30 years
  - see 'Trigger finger' care map
- aponeurotic fibroma:
  - painless, solitary deep fibrous nodule
  - often adheres to a tendon, fascia, or periosteum
- fibromatosis:
  - multiple fibromas

References:
Please see the care map's Provenance.
9 Lifestyle advice

Quick info:
If appropriate, provide advice on [2]:
• sensible alcohol intake
• smoking cessation
• see 'Smoking cessation' care map

References:
Please see the care map's Provenance.

10 Eligibility criteria for surgery

Quick info:
Please read the referral criteria before referring the patient.
At least one of the following must criteria:
• The patient has loss of extension in one or more metacarpophalangeal (MCP) joints exceeding 25 degrees.
• The patient is under 45 with >10 degree loss in extension in 2 or more MCP joints.
• There is any evidence of proximal interphalangeal (PIP) joint contracture.
The following additional patient information must apply:
• The patient is willing to undergo a surgical procedure should it be offered.
• I have discussed with the patient the fact they will be referred for a possible procedure but there is no guarantee that a surgical intervention will be the preferred outcome following the consultation with the secondary care specialist.

14 Non-surgical management

Quick info:
For people without contracture, and no significant loss of hand function [2]:
• no treatment is necessary
• reassure that tender nodules will become less tender over time
• advise the person to return when either:
  • they cannot flatten their outstretched hand
  • their hand function is compromised
• splinting or stretching to prevent progression is not recommended
• corticosteroid injections are not recommended

References:
Please see the care map's Provenance.
15 Follow-up

Quick info:
Review and measure progression of contracture over time to establish when the loss of hand function might suggest surgery [3].

References:
Please see the care map's Provenance.
Provenance certificate
Provenance certificate for this International Map of Medicine pathway for Dupuytren’s contracture published on 31 January 2012.