



Common Hand Disorders

Common hand problems



Function of the hand Motor



- grasp
- pinch
 - tip pressure
 - pulp pressure
 - lateral pressure
- hook

Function of hand sensory



stereognosis (position ,size, shape,etc.)

Pinprick

light touch

Rapid assessment of hand function



space and stability

open and close

pinch and touch

Muscles of the hand



Three group of muscles act on the fingers

long flexors

long extensors

intrinsic muscles

Ganglion



*cystic swelling in the
neighbourhood of
tendon or joint*

Ganglion pathology



wall

lining

content

uni.. or multilocular cyst

Ganglion formation



large no. of closely packed cells

formation of cavity

mucoid degeneration ? ischemia

Ganglion site



60-70% dorsal wrist ganglion
(scapholunate joint)

18 -20% volar ganglion

10 - 20% in the flexor sheath

Ganglion treatment



conservative

surgical

Carpal Tunnel Syndrome (CTS)



*The entrapment of the median
nerve at the fibro osseous
tunnel of the carpus.*

CTS

Aetiology



Decrease in the size of the canal

osteoarthritis

trauma

acromegaly

CTS

Aetiology 2



increase in the size of its contents

pregnancy

rheumatoid arthritis

alcoholism

tumour

idiopathic

CTS

Clinical Picture



patients in their 40s

female > male

pain (nocturnal)

numbness

clumsiness

CTS signs

wasting of thenar eminence

numbness

weakness

Tinnel sign

Phalen sign



CTS

Treatment

non operative

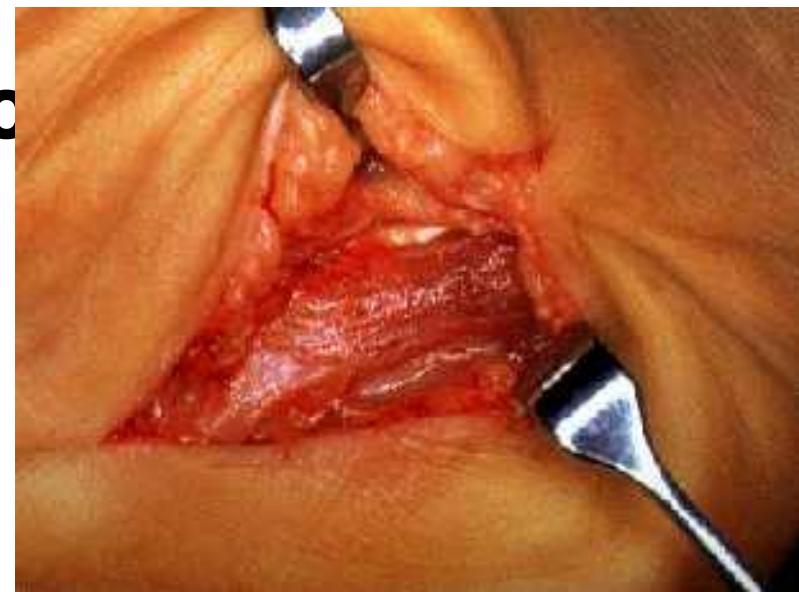
splint

steroid injection

surgical decompression

arthroscopic

open



De Quervains Disease



*Stenosing tenovaginitis of the first
dorsal extensor compartment*

De Quervain's Treatment



non operative

rest

steroid injection

anti-inflammatory

operative

Trigger Fingers



*stenosing tenovaginitis of the
flexor tendon sheath(A1 pulley)*

Trigger Finger aetiology



congenital (thumb)

often not recognised until toddlers
30% resolve spontaneously

acquired (middle aged)

- idiopathic
- traumatic
- diabetes
- rheumatoid

Trigger Finger treatment



non operative
steroid injection

operative
release of A1 pulley

Dupuytren's Contracture

*nodular hypertrophy and contracture
of the palmar fascia*



Dupuytren's Contracture aetiology

genetic
geographical
smoking
alcohol
epilepsy



Dupuytren's Contracture clinical



middle aged

male 10 x female

nodular thickening in the palm

contracture of the ring and little finger

MCPJ and/or IPJ not DIPJ

Dupuytren's Contracture treatment



Surgery if:-

- rapidly progressive contracture
- inconvenience

fasciotomy

fasciectomy

amputation