Hand and wrist pathologies

Disclaimer:
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References:
1. Mr Neil Toft orthopaedic consultant, BMI Healthcare, Youtube.
2. St Johns Hospice symposium webinar Feb 2021.

Osteoarthritis of thumb

- Pain base of thumb.
- Squaring at base of thumb.

- Grind test (axial loading).
- Xray.

- Splint for 6-8/52.
- ADL gadget's.
- Exercises.
- Steroid injection.

- Neoprene splint (procool).
- Push Brace.

- ↑ Pain free functional ROM.
- ↑ Functional strength.
- ↓ Fixed deformities of the thumb.
- Maintain joint stability.

- Can do as much steroid injections as you like.
- Until pt gets sick of them or fail to work.
- Law of diminishing return.

- Surgery.

- Can take 6-9/12 to recover.
- Fusion, joint replacement, trapezietomy.

Osteoarthritis of fingers

- Commonly DIP.
- Often mucous cysts.

De Quervain's tenosynovitis

- Differentials:
- Base of thumb CMCJ OA.
- STT joint OA.
- Trauma after fall.

- Tender at radial styloid.
- Palpable lump over radial styloid.

- If tenosynovitis, and then triggering, and then locked digit, need orthopaedic review within 1/52.

- Finkelstein's test.

- Splint for 6-8/52.
- Activity modification.
- Thumb stability exercises.

- Neoprene splint (procool).
- MCPJ blocking splint.

- Good if hypermobility at the MCPJ which causes overloading of the tendons to stabalise the joint.

if fails after 6-12/52

- Steroid injection.

if fails

- Surgery.

Release of extensor retinaculum to relieve pressure on tendons.

Carpal tunnel syndrome

- Differentials:
- Cervical nerve root compression (C6).
- Median nerve compression in forearm.
- Diabetic neuropathy.
- Raynauds.
- Flexor tendinopathy.

Some pt's have pain in all fingers, rather than just 3.5 fingers.
Much more common to have wrist problem, rather than neck pathology.
Weaknes of thumb abduction i.e. thumb moving away from palm.
Thenar wasting after 1-2 yrs fo symptoms.

- Tinnels.
- Phalens.
- NCS.

- 30% are false -ve.
- If classical symptoms, make a clinical Dx and manage as CTS.
- If not classical symptoms and -ve, can refer to 2o care.
- Also can be postive in assymptomatic hand, which are not treated.

- Splints (futura) at night for 4-6/52.
- Hand exercises.
- Injection is temporary.
- Surgery (local anaeasthetic, 10 min op).

- Use if less than 1 yr.
- If longer 1 yr unlikely will cure.
- Can use it as diagnostic test.

Sprain

- Study N= 155.
- Presented to A&E with fall and injury to hand.
- Xray = 'No bony injury'
- Dx = wrist sprain.
- Then went on to have MRI :
- 35% had #.
- 35% bone bruising.
- 47% soft tissue injury.

- Including cartilage damage and ligament tears.

- Obvious significant injury.

- Refer to # clinic or A&E.

- Mild pain.
- Minimal bruising.
- Good ROM.
- Low energy impact.

- Splint.
- Analgesia.
- Rest.
- Ice.

- Velcro strap with metal bar e.g. futura splints.
- Duration governed by how much pain they are in.

if > 4/52

- Refer to orthopaedics to review if occult # or soft tissue damage.

Bone bruise

- MRI Dx showing oedema within the bone.
- Can last weeks to months.

- Splint.

Trigger finger/thumb

- Thickening of A1 pully as lot's of force there.
- <50y.
- F>M.
- ↑ Risk if DM or repetitive.

- Usually palpable nodule at distal palmar crease = entrance to tendon sheath.

- Splints.
- Steroid injection.
- Surgery (local anaesthetic, 10 min op).

- Daytime splint (MCPJ blocking) for 6/52.
- Prevents triggering, allows functional use of hand, low profile.

- Night time (hand based extension splint) if wake with triggering.

- 60-75% effective.
- Doesnt usually work in diabetics.
- Can repeat once, ut not within 3/12 due tendon rupture risk.

Dupuytrens disease

- So if pain think tenosynovitis or trigger finger.

- Painless contractures.

- Surgery e.g. fasciotomy/fasciectomy, collagenase injections.

Only considered if Huestons table top test postive i.e. cannot press hand (fingers) flat on table.
- Generally need to have a functional problem to operate.
- 30o MCP contracture.
- 10-15o PIP contracture.

Ganglions

- In midline of flexor tendon sheath.

- Aspiration leads to recurrence.
- Do not do in finger due to potential damage to digital nerves.
- Surgery (excision).