SHROPSHIRE HOSPITALS

HAND THERAPISTS

REHABILITATION GUIDELINES

De Quervain's Disease/Syndrome (Stenosing Tenosynovitis/Tendovaginitis)

DEFINITION:

First described by Fritz de Quervain, a Swiss surgeon, in 1895 as a stenosing tendovaginitis in the 1st dorsal compartment involving the APL + EPB tendons.

AETIOLOGY + INCIDENCE

Cumulative microtrauma – forceful, sustained or repetitive thumb abduction and simultateous wrist ulnar deviation may contribute to the development of De Quervains.

Woman are more susceptible by at least a 4:1 ratio. The incidence is higher in persons 35-55 years of age. Woman in the third trimester of pregnancy and those with young children are also vulnerable.

Acute injuries to the 1st dorsal compartment can occur e.g. a sudden wrenching of the wrist and thumb which can precipitate injury but are less common.

SYMPTOMS

- Radial – sided wrist pain, 1st dorsal compartment over the radial styloid. This may radiate proximally into the forearm and distally into the thumb.
- Pain increased with resisted EPB + APL and stretching
- Positive Finklesteins test (thumb held in the palm and the wrist ulnarly deviated)
- Swelling/thickening extensor sheath 1st dorsal compartment
- Palpable crepitus of the tendons
- Pseudotriggering – rare (1% of cases)
- Reduced ROM of the wrist and thumb

DIFFERENTIAL DIAGNOSIS

- 1ST CMC JOINT OA)
- Scaphoid #)
- Radioscaphoid OA)
- STT OA)
- Scapholunate instability) Any of these can coexist with De Quervains
- Intersection syndrome)
- Radial neuritis)

- Proximal muscle imbalance)
- Cervical spine problems)

AIMS

- Reduce pain
- Reduce swelling
- Stretch out APL+ EPB tendons
- Increase ROM wrist and thumb
- Maximise function/ADL

TREATMENT – CONSERVATIVE
Consider:

- Local treatment – ice
- Splintage – to immobilize the wrist and thumb
- Activity modification – to minimize ulnar deviation at the wrist and substitute power grip for pinch grip
- Postural advice
- Strengthening and lengthening/stretching of APL + EPB
- Soft tissue/myofascial release
- Taping

NB Consider possible referral for cortisone injection (success rate 50% - 90%) – particularly if the patient is in the early stages. Patients with symptom duration of less than 2 months can have a success rate of 90% (Medl 1970)

TREATMENT – SURGICAL

Surgical release of the 1st dorsal compartment is indicated if conservative management fails.

POST- OPERATIVE MANAGEMENT

Following reduction of the dressings (2-3 days):

- Gentle AROM and tendon gliding commenced in the first few days
- Grip + pinch strengthening – 2 weeks plus stretching
- Resume heavy activities at 6 weeks

COMPLICATIONS (following surgery)

- Radial sensory nerve disturbance – possible neuroma formation
- CRPS
- Scar sensitivity
- Adhesions
- Tendon subluxation
- Incomplete release
- Incomplete relief of pain

USEFUL OUTCOME MEASURES

- MSK HQ

REFERENCES

- *Hunter, Mackin,Callahan (2002) Rehabilitation of the Hand and Upper Extremity. Fifth edition. Mosby*
- *Medl (1979). Tendonitis, Tenosynovitis, Trigger finger and De Quervains disease. Orthopaedic Clinic North America 1:37*

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