

Recognizing Hand Problems

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UW Medicine
VALLEY
MEDICAL CENTER

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Recognizing Hand Problems

Learning Objectives:

- Diagnose the problem
- Determine what can be done in clinic
- Determine when to send to hand therapy
- Determine when to send to hand surgeon

Recognizing Hand Problems

Different diagnosis managed in different ways

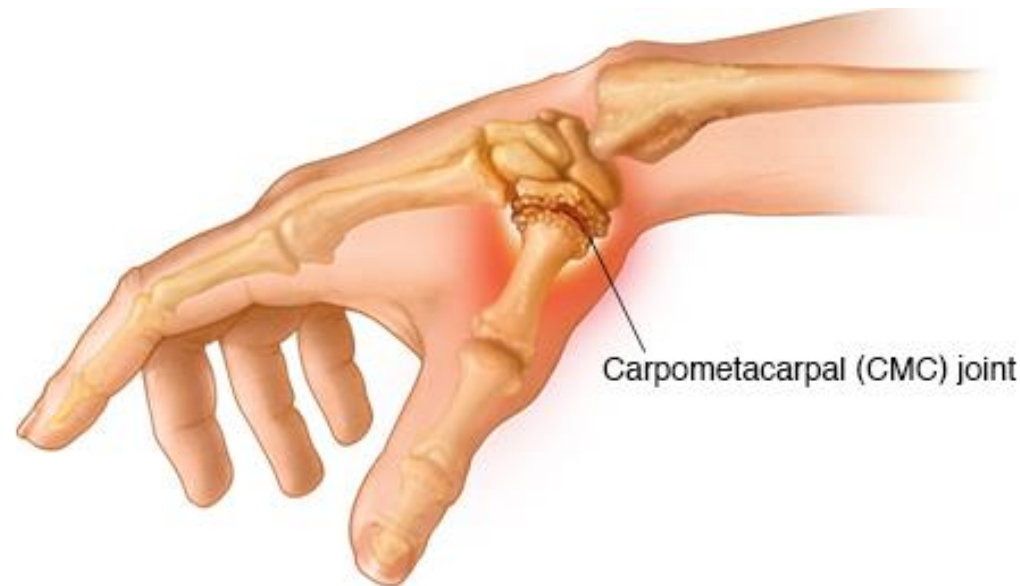
- Carpometacarpal Osteoarthritis of the Thumb
- DeQuervain's Tenosynovitis (of the Thumb)
- Trigger Finger (of the Thumb and Finger)

Carpometacarpal Osteoarthritis of Thumb

Carpometacarpal Osteoarthritis of the Thumb:

ICD Code #: M19.049

(AKA: Basilar Joint Arthritis of the Thumb)



Carpometacarpal Osteoarthritis of Thumb

Causes

- Aging / normal wear and tear
- Trauma
- Vocationally related
- Poor genes
- Rheumatic diseases

Carpometacarpal Osteoarthritis of Thumb

Symptoms

- Pain with pinching
- Difficulty holding a pen
- Cutting food
- Can't button



Carpometacarpal Osteoarthritis of Thumb

Symptoms

- Chronic swelling



Swelling base thumb

- Limited thumb opposition

Carpometacarpal Osteoarthritis of Thumb

Symptoms

X-rays show loss of joint space



Subluxation of metacarpal

Bone on Bone

Carpometacarpal Osteoarthritis of Thumb

Provocative Testing

(CMC) Carpometacarpal Grind Test

CMC Grind Test

- Rotate the metacarpal against trapezium
- Anterior / posterior shift
- Feel grind or painful

False negatives



Carpal Metacarpal Osteoarthritis

Treatment options in Doctors office

- Arthritis education
- Anti-inflammatories for pain and swelling
- Splinting

Carpal Metacarpal Osteoarthritis

Splint:

- Provide support
- Allow functional
- Limit motion at CMC joint only



“Bad Splint”



“Good Splint”

Carpometacarpal Osteoarthritis of Thumb

Splint available in your clinic



“Comfort Cool, Hand Based Thumb Spica Splint”
High patient compliance for wear

Carpometacarpal Osteoarthritis of Thumb

When to wear splint

- Wear 24 hours a day (remove for skin check)
- Heavy work
- To prevent further deformity
- Stop wearing when pain stops

Make sure your patient can put splint on

Carpometacarpal Osteoarthritis of Thumb

When to send to Hand Therapy
For custom orthotic



Carpometacarpal Osteoarthritis of Thumb

When to send to Hand Therapy

- Patient education
- Home exercises
- Adaptive aids for increased independence
- Modalities for pain



Carpometacarpal Osteoarthritis of Thumb

When to send to Hand Surgeon

- Severe joint deformity
- Hand dysfunction
- Excessive pain
- Splinting and therapy didn't help



Carpometacarpal Osteoarthritis of Thumb

Hand Surgeon can offer

- Anti-inflammatories / injections
- Surgical options
 - CMC Soft Tissue Arthroplasty



Carpometacarpal Osteoarthritis of Thumb

Hand Surgery (CMC Soft Tissue Arthroplasty)

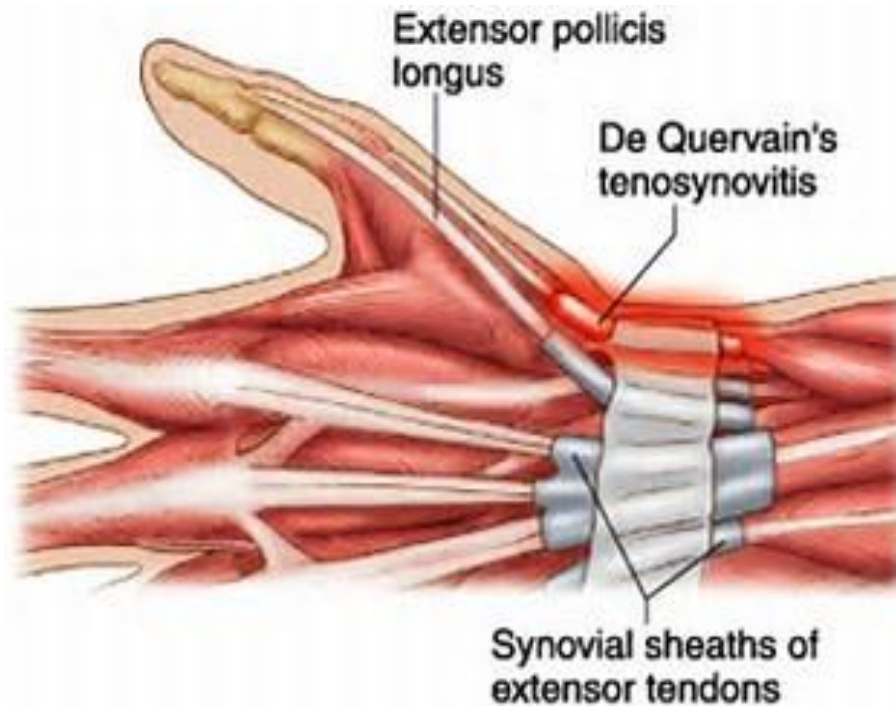
- Restores function
- Pain eliminated
- Great success rate
- Long term solution



De Quervain's Tenosynovitis

Radial styloid tenosynovitis [De Quervain's]

ICD Code #: M65.4



De Quervain's Tenosynovitis

Causes

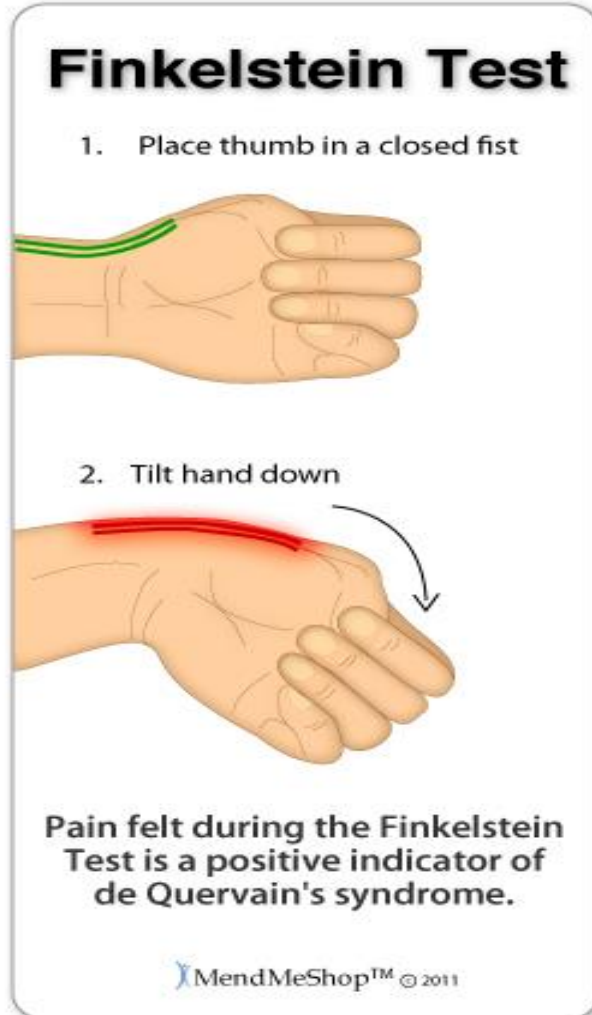
- Repetitive radial or ulnar deviation of wrist
 - new parents, dental assistants, use of computer mouse, use of scissors
- Trauma
- Hormones
- Women vs: Men, 4:1
- 35-55 years old

De Quervain's Tenosynovitis

Symptoms

- Radial-sided wrist pain at 1st dorsal compartment
- Pain worse with movement
- Swelling likely at 1st dorsal compartment

De Quervain's Tenosynovitis Special Test



- Compare right vs left
- Active and passive
- Pain vs Stretch
- Pain with resisted thumb extension.

DeQuervain's Tenosynovitis

Surface Anatomy:



DeQuervain's Tenosynovitis

Treatment options in Doctors office

- DeQuervain's Education
- Anti-inflammatories
- Icing
- Splinting

DeQuervain's Tenosynovitis

Splints available in your clinic:

- Comfort Cool forearm-based thumb spica splint



DeQuervain's Tenosynovitis

Fitting Splint

- Not too tight.
- Prevent thumb flexion
- Prevent wrist flexion
- Prevent wrist ulnar deviation
- Must be comfortable for splint compliance

DeQuervain's Tenosynovitis

Splinting wear guidelines

When to wear this splint:

- Wear 24 hours a day (remove for skin check)
- 6 weeks duration (or till symptoms stop)
- Wean out of splint slowly

DeQuervain's Tenosynovitis

When to send your patient to Hand Therapy:

- Custom orthotic fabrication
- Patient education
- Activity modification
- Adaptive equipment
- Modalities for pain and inflammation

DeQuervain's Tenosynovitis

- Example of custom orthosis



DeQuervain's Tenosynovitis

When to send to Hand Surgeon

- Crepitus of tendon
- Needs steroid injection
- Chronic condition
- Therapy not helping
- Needs surgery
 - Firsts dorsal compartment release
 - Highly successful

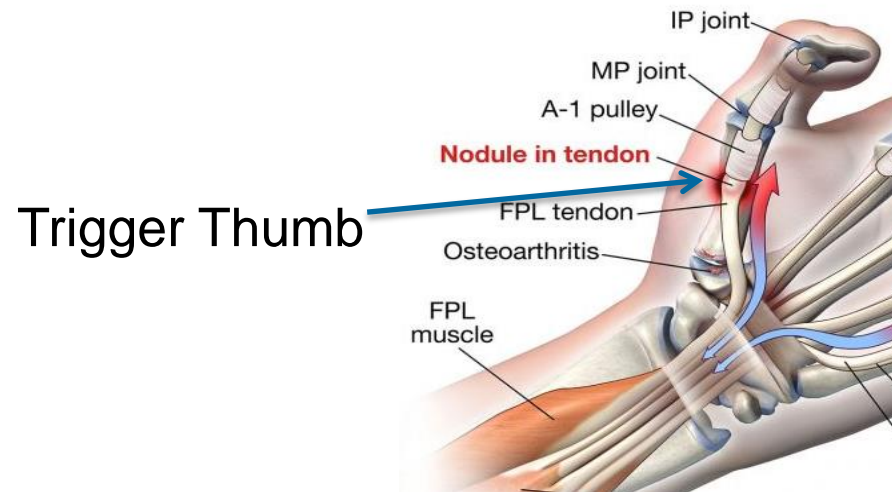


Trigger Finger

Trigger Thumb:

ICD Code #: M65.31

(AKA: Tenosynovitis of the Thumb)

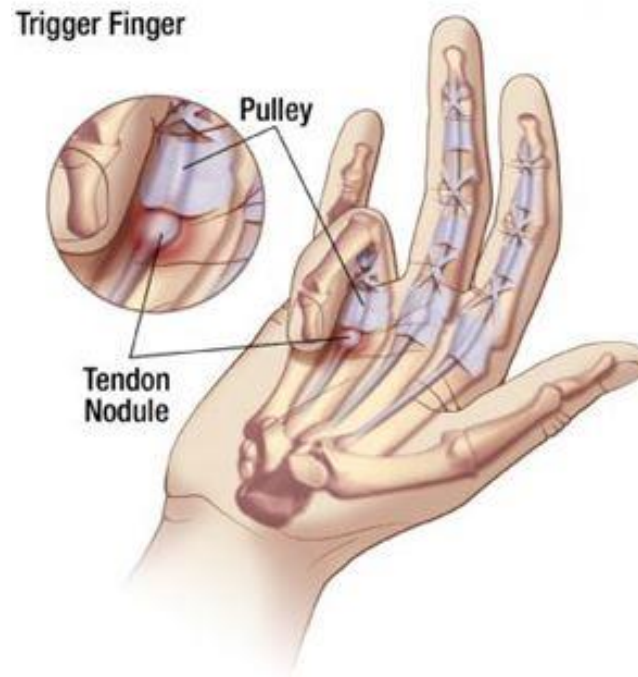


Trigger Finger

Trigger Finger:

ICD Code #: M65.30

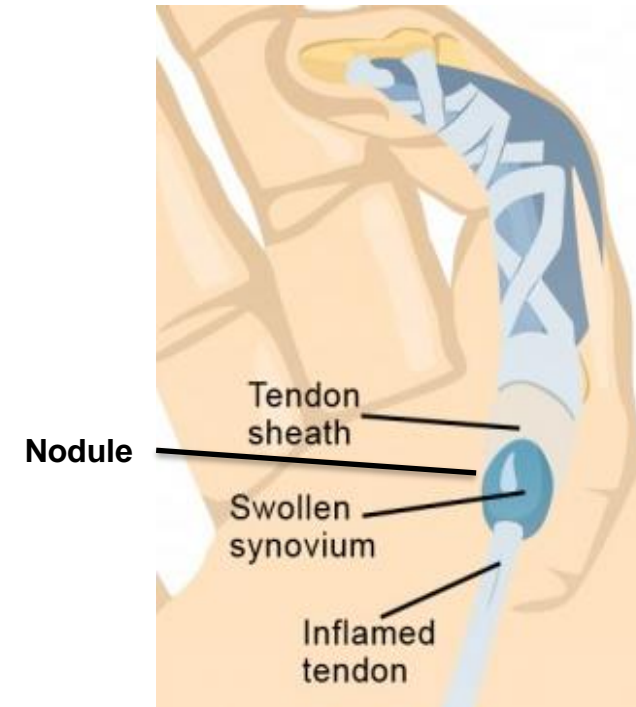
(AKA: Tenosynovitis of the Finger)



Trigger Finger

What is Triggering?

- Tendon and sheath swell
- Increased tendon friction
- Tendon fibers create nodule
- Digit catches or locks



Trigger Finger

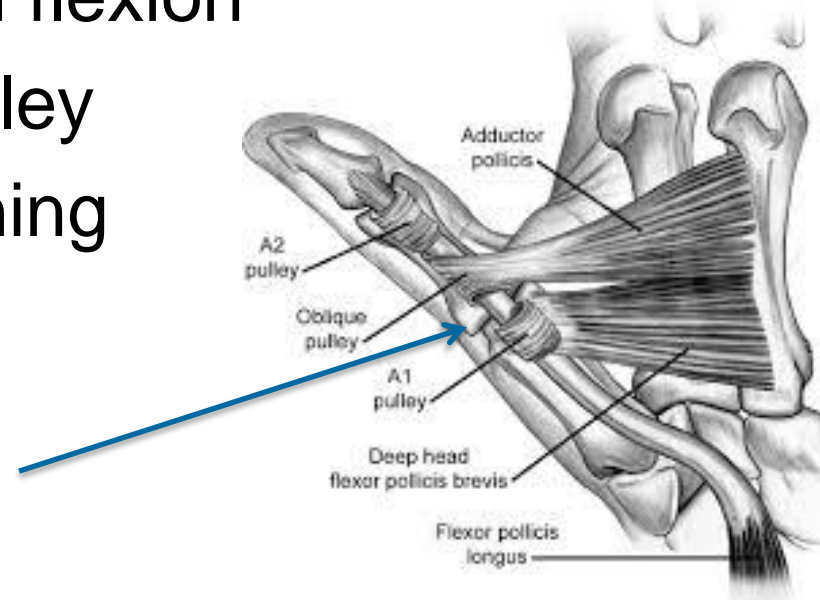
Causes

- Associated with RA, Gout and Diabetes
- Post carpal tunnel release
- Hormonal changes (multiple digits at times)
- Vocationally related
- Repetitive pinching or pressure on tendon

Trigger Finger

Symptoms

- Catching / triggering with flexion
- Pain / swelling at A-1 pulley
- Triggering worse in morning



Trigger Finger

- Advanced cases, digit locks
- Need to manually extend



Trigger Finger

Treatment options in Doctors office

- Trigger finger education
- Anti-inflammatories
- Splinting

Trigger Finger

Splinting Goal

- Decrease MCP or IP joint movement
- Allow function so patient will wear.

Trigger Finger

Splint available in your clinic



“Comfort Cool, Hand Based Thumb Spica Splint”
High patient compliance for wear

Trigger Finger

Splint available in your clinic



“Premier Thumb Splint with Stays”

Trigger Finger

When to wear

- Wear 24 hours a day (remove for skin check)
- Wean out when no triggering x 2 weeks

Trigger Finger

When to send to Hand Therapy

Custom Trigger Thumb Orthosis



Trigger Finger Orthosis



Trigger Finger

When to send to Hand Therapy

- Patient education
- Activity modification
- Adaptive aids for increased independence
- Modalities for pain / stiffness

Trigger Finger

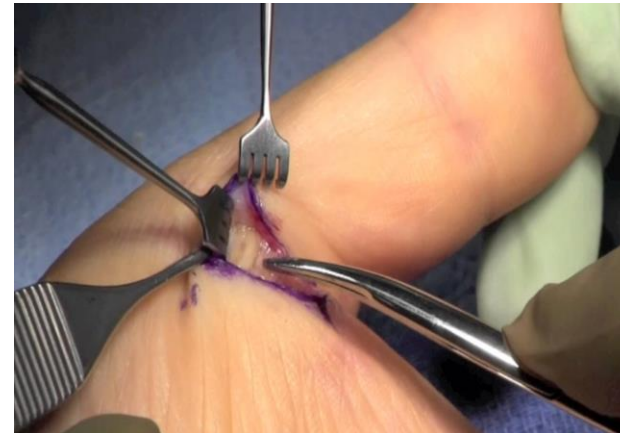
When to send to Hand Surgeon

- Digit locks > 3 times a day
- Triggering for longer 3 months
- Splinting and therapy didn't help

Trigger Finger

Hand Surgeon

- Steroid injections to A-1 pulley
- Surgery
 - A-1 pulley release
 - Restores function
 - Short recovery
 - Long term solution



How to refer to Hand Therapy

Referring to Hand Therapy

- Procedure Information
 - REF612- Hand Therapy
 - Referral – Evaluate and Treat

Referral

| | | | |
|--|---------------------------------------|---|---|
| Referral Information | | Referral Status | Status Update |
| Referral # 1481494 | Creation Date 11/01/2016 | Clinic Pending | 11/01/2016: Status History |
| Status Reason none | Referral Type Occupational Therapy | Referral Reasons Specialty Services Required | Referral Class Internal |
| To Specialty Preventive Medicine: Occupational Medicine | To Provider none | To Location/POS none | To Department VMC REHAB SERVICES |
| To Vendor none | Referred By Gia L Hemmen, MD | By Location/POS COVINGTON CLINIC | By Department RHEUMATOLOGY COVINGTON |
| Priority Routine | Start Date 11/01/2016 | Expiration Date 04/30/2017 | Referral Entered By Gia L Hemmen, MD |
| Visits Requested 12 | Visits Authorized 12 | Visits Completed 0 | Visits Scheduled 0 |

Procedure Information

| | | | | |
|--|-----------|----------|-----------|----------|
| Procedure | Modifiers | Provider | Requested | Approved |
| REF612 - Hand Therapy Referral - Evaluate and Treat | | | 1 | 1 |

Diagnosis Information

Diagnosis
M05.79 (ICD-10-CM) - Rheumatoid arthritis of multiple sites without organ or system involvement with positive rheumatoid factor

Diagnosis Description
Hand

Referral Order

Order
Hand Therapy Referral - Evaluate and Treat (Order # 45478837) on 11/01/2016
View Encounter

Recognizing Hand Problems

Questions?

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References

Skirven, T.M., Osterman, A.L., Fedorczyk, J.M., (2002). *Rehabilitation of the Hand and Upper Extremity*. Philadelphia, PA: Elsevier Mosby

Stack Splints

Comfort Cool

Able Wear Splints

Krames on Demand