Arthritis and Hand Therapy

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What is Arthritis?

Cartilage over bone surfaces wears out

1) OSTEOARTHRITIS

2) RHEUMATOID ARTHRITIS
Types of Arthritis

OSTEOARTHITIS

• Degenerative (wear and tear)
Types of Arthritis

RHEUMATOID ARTHRITIS

• Inflammatory
Osteoarthritis (OA)

27 joints in the hand

**Locations:**

- Base of the thumb (CMC joint)
- End joint of the fingers (DIP joint)
- Middle joint of the fingers (PIP joint)
- Also develops at wrist
Signs and Symptoms of Base of thumb OA

- Pain
- Stiffness
- Swelling
- Weak pinch and grip
- Poor function
Signs and Symptoms of Base thumb OA

- “Squaring” of joint
- Deformity (Z shape)
- Flatter “O” during opposition (more of a “D”)
Assessment of Base of thumb OA

- X-Rays
- Observation
- Clinical assessment (palpation and grind test)
Treatment of Base of thumb OA

Conservative

• Splinting
• Education (joint protection)
• Heat (hot pack / wax baths)
• Gentle range of motion
• Steroid Injection
Treatment of Base of thumb OA

Splinting

- Short opponens splint
- Maintains functional position (lessens deformity)
- Rest and Activity
Joint Protection Principles

- Rest
- Spread the strain
  - use more joints to do work
  - use larger joints to do work
- Avoid gripping narrow and small objects
- Avoid deforming positions (RA)
- Energy Conservation
Joint Protection Principles

Activity Of Daily Living (ADL) Devices

Incorrect

Correct
Treatment of Base of thumb OA

Surgery

• Trapeziectomy (arthroplasty)

• Joint Replacement
Signs and Symptoms of Tip joint OA

• Pain and swelling at tip joints
• Enlargement and deformity
• Heberden’s nodes (mucoid cysts)
Treatment of Tip joint OA

Conservative

- Splinting
- Education (joint protection)
- Heat (hot packs / wax baths)
- Gentle range of motion
Other types of Osteoarthritis (OA)

Wrist OA (pain during wrist motion)

Management:

- As previously
- Splint (wrist brace)
Rheumatoid Arthritis (RA)

Locations:

• Multiple joints of the hand
• Primarily big knuckles (MCP joints) of the hand
• Associated with other conditions (ie. triggering and CTS)
Signs and Symptoms of RA

• Heat and swelling in joints

• Deformity
  – MCP joint ulnar drift
  – Z deformity of thumb
  – Swan neck

• Weak grip and pinch

• Poor function
Assessment of RA

- Blood tests
- X-Rays
- Clinical Assessment

![Normal hand](image1.png)
![Rheumatoid arthritis](image2.png)

- Bone erosion
- Bone displacement
Treatment of RA

Conservative

- Splinting
- Education (joint protection)
- Heat (hot packs / wax baths)
- Gentle range of motion
Treatment of RA

Splinting

• Antideformity Splints
  “MUD” splint

• Night resting splints
How to attend for a Hand Therapy assessment?

Number of convenient locations across Melbourne:

- Box Hill
- Blackburn
- Mt Waverley
- Ringwood

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