

# Exercise, Strengthening and Rehabilitation for Hand Therapy

# WHY?

- To reduce pain
- To maintain and increase range in joints
- To maintain and improve tendon excursion /gliding
- To maintain and improve strength
- To reduce swelling
- To mobilise scar tissue

# How do you know which type of exercise?

- **Assess**
- **Establish clear goals**
- **Set clear short and long term objectives.**

# Which type of exercise?

- Passive?
- Active assisted?
- Against resistance?
- Through range?
- Composite or isolated?
- Active?
- Concentric?
- Eccentric?
- Isometric?
- Isotonic?

# What makes a good exercise programme?

- Purposeful
- Why are they doing these particular activities or exercises? How do they relate to the end goal?
- Easily incorporated into daily life
- Achievable
- Fun

# A progressive sequence

- Passive IPJs and MCPJs
- Composite IPJs and MCPJs
- Place and hold
- Active ROM
- Resisted Isotonic, isometric.
- Activities to stimulate and strengthen component muscles.
- Activities to improve proprioception, stereognosis and speed.

# Activities for ROM

- Tendon gliding sequence
- Place and hold
- Splints – block or TERT
- Rice/beans span and grip pass from one bowl to another
- Flicking cotton wool ball/ ping/pong ball/pom-pom for extension
- Scraping wet rice/lentils off hand ( no help from the opposite one)
- Pen walking

# Activities for Dexterity

- Scissor work – hold scrap in little and ring fingers.
- Crumpling newspaper into a ball
- Walking a ball up leg, across tummy and down leg
- Twirl bean bag/ sock full of corn through the air
- Turning coins or cards
- Stacking coins/buttons
- Cats cradle
- Play dough
- Marbles
- paperclips



# Activities



Ideas for ROM span and full fist



ideas for interosseal strength

These can be timed, they can be counted, you can use different sizes of objects in the bowl.

# Activities



You can create blocking splints with pencils, extension blocking for improving PIPJ extension, flexion blocking to improve PIPJ flexion.

# More Activities



Elastic bands are great for strengthening extensor, cards for dexterity, lumbricals, pinch.



# Pencil Walking and Rolling

- Great for individual tendon work – loosen those rusty cables!

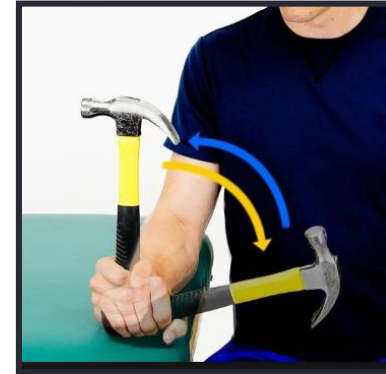


# Activities for Strength

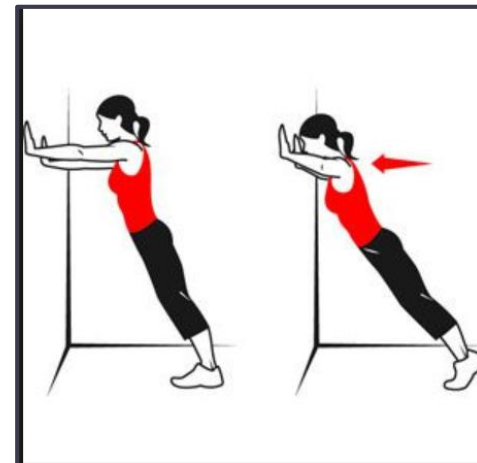
## Pegging



## Pro/supination



- Tennis ball monster





# Summary

- Try to make it fun
- Try to make it purposeful
- Think of progression
- Think about the patient's needs.



My Dad's holding my youngest

