THUMB METACARPO-PHALANGEAL INJURIES POST-OP REHAB
OPTIMIZING RESULTS

D. THOMAS, I. DAVID
D. ZANIN
ASYMETRICAL CONDYLOID JOINT + CAM EFFECT
FLEX-EXT. ABD-ADD. ROTATION
JOINT SHAPE + SESAMOID
MUSCLES ACTION

ADP    ABPB, FPB, OP
MCP RADIAL DEVIATION AND PRONATION INDISPENSIBLE FOR PINCH / GRIP
PREVENTION OF STIFFNESS

HEALING PROCESS =
OEDEMA / ADHESIONS / FIBROSIS

CAPSULE-LIGAMENTS CONTRACTURE
CULS DE SAC SYMPHISIS

• IMMobilisation
  in correct position
• EDEMA CONTROL
• GENTLE PROTECTED MOBILISATION
  FULL IP FLEXION
  SOME MCP FLEX-EXT
  ROTATION

• EXCEPT FOR UNSTABLE JOINTS....!!!
• WITH SURGEON’S AGREEMENT

D. Thomas

B. Vincent
CONSEQUENCES OF NON MONITORED IMMOBILISATION

- VICIOUS DEVIATION OF MCP AXIS = UCL / RCL HEALING IN LENGHTHENED POSITION
  UNEVEN TRACKING → CMC OA

- IP FLEXION LAG = EPL ADHESIONS + FIBROSIS

ORTHESIS SHOULD IDEALY BE MADE AND REMODELED BY THE THERAPIST ENCHARGED WITH REHAB

REGULAR MONITORING OF PATIENT
IMMOBILISATION SPLINT

EDEMA REDUCTION

MCP MALPOSITION RADIAL/ ULNAR DEVIATION

SPLINT REMODELING
RISK OF LIGAMENTS HEALING IN LENGTHENED POSITION

RADIAL DEVIATION

ULNAR DEVIATION

UNEVEN TRACKING

IRREGULAR WEAR AND TEAR
MCP OSTEOARTHRITIS
UNEVEN TRACKING

IRREGULAR WEAR AND TEAR

MCP OSTEOARTHRITIS
IMMOBILISATION

CIRCULAR GAUNTLET (CAST/POLYESTER) CONTAIN but poorly maintain

Gliding + crushing of soft tissues = splint displacement = poor control of MCP axis
SEMI CIRCULAR SPLINT + STRAP = MAINTAIN
Hand « pushed » / maintained into the splint
Non sticky material = possibility to open and close the thumb support
REHABILITATION: ROM IMPROVEMENT
Cast removal 1 month post-op

SOFT TISSUE CONTRACTURE ADHESIONS (EPL) / FIBROSIS
LIMITATION OF MCP / IP FLEXION - EXTENSION MCP PRONATION
Difficulty to manipulate small objects, writing
REHABILITATION  ROM IMPROVEMENT
PASSIVE MOBILISATION
CAREFULL!!

Joint impingement
Nociceptive defense reflex
IMPROVEMENT OF ROM MCP, IP, FIRST WEBBSPACE

DO NOT AGGRAVATE CMC OA

PROTECT CMC DURING MCP / IP FLEXION EXERCISES

ELECTROACTIVE EXERCISE
CAPSULE-LIGAMENT CONTRACTURE / STIFFNESS
Active exercise + Electroactive (FPL + FPB) under traction
Japanese finger trap and traveling
MCP ROTATION LAG / STIFFNESS
active – passive- resisted exercises  (F. Busso)
IMPROVEMENT OF ROM

MCP, IP, 1st WEBBSPACE : ALTERNATED POSTURE SPLINT

FLEXION progressive static : DAY / EXTENSION serial static : NIGHT
RETURN TO SPORT ACTIVITIES
PROGRESSIVE WEANING OF PROTECTION SPLINT
SIR CHARLES BELL

On the length, strength, free lateral motion, and perfect mobility of the thumb, depends the power of the human hand.

1833

THUMB IS PROPER TO MAN