

MODIFIED DURAN PROGRAM: FLEXOR TENDON REPAIR (ZONES I II III)

DAY 2-3

Remove protective splint making sure to keep hand postured in a protective position.
Remove post-op bulking dressings, inspect the wound and replace with a light dressing.
(allow wound to breathe).

Fabricate and fit the involved hand in a dorsal block splint positioned at:
wrist (0°) flexion; MCP's (60°) flexion; IP's at full extension.

May use palmar bar to improve fit into splint if indicated.

Splinting and protocol to include the involved and adjacent digits.

Initiate edema management. (ie retrograde massage / coban edema wraps/ digi-sleeve)

Considerations:

1. If the repair involves a digital nerve then place the involved PIP joint at (20°) of flexion.
2. If the involved digits are unable to achieve outlined extension, then gradually increase extension to the desired position over the next few days.

Exercise Program

1. Instruct the patient to perform PROM of the digits into composite flexion and AROM of digit extension to dorsal block (10) repetitions every waking hour.
2. The therapist may participate in isolated FDS/ FDP tendon gliding exercises in the clinic, using the Duran technique.

Week 2

Sutures are removed in the physician's office.

Continue with wound and edema management as indicated.

Initiate scar management as indicated. (i.e. scar massage, scar mold, mini-massager).

Exercise Program

1. Continue with digit PROM flexion and AROM extension to dorsal block.
2. Initiate gentle "place and hold" of the digits.
3. Initiate gentle PROM wrist flexion and protected extension in a tenodesis fashion.

Week 3

Exercise Program

Initiate gentle "toggle" of the digits into flexion of the digits.

Week 4

Begin to wean from the dorsal splint.

Modify dorsal block to increase extension for: wrist to (10°-15°) of extension, to be worn during increased activity and at night.

May participate in light non-resistive simple ADL's in a controlled environment.

Exercise Program

Initiate light sponge activity.

Week 4-6

Initiate E-stim. to increase tendon excursion.

Initiate U/S to help manage scar adhesions.

If digital nerve repair was performed then initiate PIP extension by (10°) per week.

Week 5

Initiate BLROM of the digits.

Progress with weaning from the splint.

Modify dorsal block splint to increase wrist and digit extension to assist in positional lengthening of the flexors for night and intermittent day use. (Static / Progressive Splinting)

Week 6

Initiate light strengthening ex with putty.

Initiate dynamic LMB PIP extension assist splints if indicated.

Week 8

Initiate progressive strengthening exercises (ie BTE).

Week 10

Progress with ROM and strengthening as tolerated.

Resume with normal activity as tolerated.

