

# **Dupuytren's Release**

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#### Goals of therapy

- (1) promote wound healing
- (2) minimize edema
- (3) prevent recurrent flexion contractures
- (4) maximize digit flexion
- (5) minimize scar formation

#### Days 1-3

- Remove bulky post-op dressings, including vessel loops/drains from the wound
- Evaluate digit sensation, documenting any sensory changes
- Using sterile technique, apply dressings. If wounds are macerated from sanguinous oozing, apply additional gauze sponges to wick moisture from incision sites
- Fabricate hand-based thermoplastic static extension splint using perforated splinting material, or perforate with hole-punch, to minimize skin maceration
- Fabricate dynamic extension splint if patient is unable to demonstrate good extension of affected digits (greater than 30-degree extensor lag).
- Begin active and active-assistive range of motion to patient tolerance, including "place and hold" exercises to maintain joint mobility and minimize pain
- Patient education regarding ADL's:
  - Avoid heavy lifting or gripping, as this may lead to wound dehiscence
  - Maintain upper extremity elevation to minimize edema
  - Avoid activities that apply friction to incision sites, such as opening jar lids, turning door knobs
- Edema reduction techniques with co-ban wrap to digits, tubigrip sleeves to hand and wrist, or kinesiotape to dorsal surface of hand and digits

 Patient education regarding wound care, dressing changes, and signs of infection

### Week 2 (First follow-up visit with PA)

- Sutures are removed if wounds are well-healed
- Begin gentle scar massage if wounds are well-healed
- Begin silicone gel pad if wounds are well-healed
- Continue splinting as needed to maintain range of motion
- May convert to Capener splint for PIP joint extension if palmar wounds are well-healed
- Begin use of elastomer pad for prolonged palmar edema or early scar formation
- Begin gentle theraputty to encourage digit flexion if wounds are wellhealed
- Active and passive range of motion to patient tolerance

#### Weeks 3-8

- Continue aggressive scar management techniques
- Continue night extension splinting for total of 12 weeks
- Continue edema reduction techniques as needed