### Mini-Medical School



# Tendon Suture 手部肌腱斷裂縫合介紹(英文)

Hand injury incidence has increased due to endless industrial accidents, traffic collisions, and gangster fights. Our hands play a significant role in our daily life; once our hands get damaged in a way that functionalities get compromised, it would have a huge impact on our daily activity. Often the success of the treatment results from a successful operation; a complete treatment plan; and most important, patient's cooperation, endurance, and effort.

## Purpose

"Tendon Suture" literally means to sew up split tendon in order to recover its functions to flex or extend, and to restore its normal strength and appearance.

#### **Treatment**

Doctors path up tendons base on patients' age, occupation, health, and degree of the injury.

# Post-Operational Exercise Plan

- 1. This is a critical period because improper exercise at the early stage could have sutured tendon break; however, zero exercise could generate adhesive tendon. Therefore, patients should work on retrained and protective exercise for up to 8 weeks.
- 2. After the surgery, patients would be put on a splint for up to 6 weeks; and it cannot be removed at patients' will.
- 3. With a rubber band, splints will be stabilized to keep patient's finger and wrist in mild flex position.
- 4.  $1 \sim 4$  weeks after the surgery:

- a. With the splint on, passively flex the injured finger and voluntarily stretch it with the resistance of the rubber band.
- b. At this time, patients are unlikely to stretch injured hands completely. Instead, our therapist would guide patients to flex the distal and proximal knuckles under 90 degree bending of the metacarpophalangeal joint, at least 10 times every hour.
- c. 10~14 days after the surgery, your attending physician will take off the stitches; you may then start massaging your hands and raising the injured portion.
- 5.  $4 \sim 6$  weeks after the surgery:
  - a. Remove the rubber band.
  - b. Reduce the bending level of the splint
  - c. Voluntarily flex the finger without resistance
  - d. Flex the injured finger passively, and then stretch it voluntarily.
- 6. 6 ~ 8 weeks
  - a. If all goes well, remove the splint so that fingers and wrists can move freely in all directions.
  - b. Tendon sliding exercise: to eliminate adhesion, clench and release your fist at least 10 sets each time and 3 to 4 times a day:
    - Open and stretch your palm
    - Stretch metacarpophalgangeal joint, and flex interphalgangel joint.
    - Flex metacarpophalgangeal and proximal interphalgangel joints, and stretch the distal interphalgangel joint
    - Clench
  - c. Occupational training, start from 2 minutes a time each day and progress to 15 minutes a time, 4 times a day.

#### 7. 8 ~ 12 weeks

Continue all exercises from previous stages with increased resistance. All daily activities can be resumed without any restrictions.