Flexor Tenolysis
(Frayed Tendon Program)

Grading System:

Grade 1- Thinned but not frayed – the possibility of rupture is minimal.

Grade 2- Frayed over a small area or specific point – the possibility of rupture is fair (50/50).

Grade 3- Frayed over the majority of the lysed area or there is a pseudo-tendon – high risk of rupture is possible.

Note: It is essential for the tendon quality to be charted.

Indications:

The frayed tendon program is reserved for those patients in whom intraoperatively it is noted that the quality of the flexor tendon system is quite poor with some degree of risk of rupture in the postoperative phase. In addition, this program is reserved for severely edematous digits that will encounter a great deal of resistance with AROM in flexion.

>24 Hours Postop:

Postoperative TENS (high rate conventional TENS) may be initiated to the peripheral nerve distribution of the surgical area. The postoperative TENS is generally worn for 5 to 6 days to quiet the discomfort associated with this surgical procedure.

1 Day Postop:

The bulky compressive dressing is removed and a light compressive dressing is applied to the hand and forearm as well as digital fingersocks or Coban™. Elevation is emphasized at all times during the early postoperative phase with the hand being positioned above the heart.

Exercises which are performed for 5 o 10 minute sessions each hour include passively flexing the digit into the palm and then asking patient to actively flex his/her fingers as the therapist or the patient gently remove the uninvolved hand. Once the patient has actively flexed the digits then the patient is asked to actively extend the fingers. The wrist is positioned in a neutral position during the exercise and no composite passive extension is allowed to the wrist and digits to minimize tension on the long flexors.

With Grade I frayed tendons the patient may generally begin gentle AROM along with FES as needed. In addition, if necessary, a frayed or protective type of blocking exercise may be initiated. This would consist of the patient manually positioning the PIP or DIP joint into the block position and then attempting to hold it actively. Patients continue on this program 3-4 weeks.
Flexor Tenolysis (Frayed Tendon Program) [continued]

With Grade II frayed tendons the patient simply performs a frayed exercise program consisting of passively flexing the finger into the digit then attempting to actively hold the finger in flexion, followed by gentle active extension.

With Grade III frayed tendons in which the tendon is severely frayed and/or is a pseudo tendon then FES may not be initiated and the frayed exercises are gently performed. Patients on this program will continue the frayed exercises for 6 to 8 weeks.

An extension resting pan splint is fitted to all digits to wear between exercise sessions and at night. The digits are positioned in the active extension achieved with no attempt to passively extend the digits further.

Dynamic flexion splinting may be initiated as necessary.

2 Weeks Postop:

Within 24 to 48 hours postoperatively scar massage with lotion and/or the use of otoform or elastomer may be initiated.