

# Trans-Tibial Post-Operative and Extended Ambulation Protocol and Fitting Instructions

## A. Patient Selection:

1. All diagnoses will benefit from application of one or more segments of the APOPPS®
2. Patients must be coherent and cooperative (except in O.R. applications)
3. Patients must have reasonable family support
4. Patients must demonstrate reasonable upper body strength
5. Residuum length must be between 4 ¼" and 6 ¼" for 7" socket systems
6. Residuum length must be between 6 ½" and 8 ¼" for 9" socket systems
7. Sockets will accommodate distal circumferences between 11" and 25" (roughly 14" to 24" at the MPT)
8. All other amputation lengths and circumferences require custom sockets and systems (same day shipping available)

## B. Postoperative Socket Fitting:

1. Patients are fit with the FLO-TECH-TOR™ within one week of amputation surgery (see Physician and Prosthetist protocol)
  - a. Record date of surgery
  - b. Record date of fitting
2. The FLO-TECH-TOR™ is applied in the following manner when patient is at rest (not ambulating):
  - a. All belts, extension straps as well as thigh and socket bands should be snug – NOT TIGHT
  - b. Mid-patella strap - Loose enough to slide 1 to 2 fingers under it - Do NOT leave in tightened state
3. The FLO-TECH-TOR™ is removed 2 times per day
  - a. Once at bedtime - Once in the morning
  - b. Visual examination should reveal a total contact fit – if not select the proper size, length and circumference
4. While the FLO-TECH-TOR™ is off:
  - a. Examine the outer sock for spotting
    - i. Record small spotting – Size & Location
    - ii. Contact Physician for large amounts of spotting
  - b. Remove outer sock ONLY
  - c. Remove the reticulated pad
    - i. Rinse the pad in cool water
    - ii. Squeeze dry in a towel - Do not wring
    - iii. Reapply pad to residuum
  - d. Reapply clean dry outer sock
5. Allow patient to range the knee as much as is reasonably comfortable (see Physical Therapist)
6. Reapply the FLO-TECH-TOR™ in 15 to 20 minutes from the time it was removed
7. When ambulating patient in parallel bars or walker (un-weighted residuum)
  - a. All belts, extension straps as well as thigh and socket bands must be tightened
  - b. Mid-patella strap must be tightened
  - c. Apply upward pressure to the distal end
    - i. Should be relatively pain free with pressure equaling approximately 5% body weight of patient's body
    - ii. When session is over follow procedures in step; B, #4, a, b, c & d
8. Begin distal weight bearing 48 hours after application of the FLO-TECH-TOR™
  - a. All belts, extension straps as well as thigh and socket bands must be tightened
  - b. Mid-patella strap must be tightened
  - c. Apply upward pressure to the distal end
  - d. Should be relatively pain free with pressure equaling less than 10% of patient's body weight
  - e. When session is over follow procedures in step; B, #4, a, b, c & d
  - f. Reapply FLO-TECH-TOR™ as in step; B, #2, a & b

*Continued on next page ...*

# Trans-Tibial Post-Operative and Extended Ambulation Protocol and Fitting Instructions ... *continued*

## C. Rehab System Fitting:

1. When the patient is deemed ready for supervised weight bearing on the residuum, with application of the UFOS™, (48 hours to 7 days post amputation surgery or 48 hours after application of the FLO-TECH-TOR™)
  - a. Select the matching size UFOS™ to correspond to the FLO-TECH-TOR™ the patient is wearing
  - b. Patients should use amputation socks, in the size, number and thickness, that are comfortable but not too thick
  - c. Follow procedures in step; B, #8, a, b, c & d
  - d. Apply the UFOS™ directly over the FLO-TECH-TOR™ with all bands and straps tightened
    - i. An over sleeve can be used to facilitate the donning process
    - ii. Tighten all straps on the UFOS™
2. Apply pressure to the prosthetic foot - with patient standing with good upright posture
  - a. Pressure should be equal to 10%, or less, of the patient's body weight
3. When the session is over
  - a. Remove the UFOS™ and the FLO-TECH-TOR™
  - b. Visual exam should reveal a total contact fit – if not, select the proper length and circumference
  - c. Follow the procedures in step; B, #4, a, b, c & d
4. Reapply FLO-TECH-TOR™
  - a. Follow procedures in step; B, #2, a & b
5. Record all findings before progressing patient to next level in the rehabilitation pathway
6. Patients progress in 10% increments from 10% weight bearing to 20%, 30%, 40%, 50% etc. by:
  - a. Follow this guide to determine readiness for increased weight bearing
    - i. Patients must perform supervised ambulation 2 consecutive days without pain, spotting or drainage
  - b. If patient reaches a significant level of weight bearing and suddenly shows spotting, or indicates pain, drop back to the previous level of weight bearing until patient is trouble free for 3 days.

## D. Prep System Fitting:

1. When patient is deemed ready for full range of knee motion and independent (unsupervised) ambulation:
  - a. Select the corresponding size and side VCSPS™ (preparatory APOPPS®)
  - b. Remove the FLO-TECH-TOR™
  - c. Patients should use amputation socks, in the size, number and thickness, that are comfortable but not too thick (it is not uncommon to add more thickness due to shrinkage)
  - d. Patients should use appropriate assistive devices (walker, crutches, etc.)
2. Apply the VCSPS™ to the patient
  - a. Tighten MPT strap and socket bands as well as pelvic belt and extension strap (if used)
  - b. Pass the distal socket strap down through the UFOS™
    - i. Pass the distal VCSPS™ socket strap out and around the anterior portion of the UFOS™
    - ii. Secure strap to buckle – Draw strap to desired tightness
    - iii. Strap reduces the AP as well as the ML & circumference
3. Ambulation should be at full weight bearing
  - a. Continue training until patient is ambulating independently at the expected level of rehabilitation
4. Record all findings before releasing patient from the Rehabilitation program.