Non-Operative
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The merits of non-operative treatment of PTTD will be reviewed during the debate. There are patients with family responsibilities who can not financially afford to take 8-12 months to get over PTTD reconstruction surgery. There are other older individuals who feel their time is limited or have no one to help them during the recovery from such surgery. There are also those patients that, quite frankly, should not have surgery because of poor risk, predictably poor outcome, or surgeon's gut feeling “I really don't want to operate on this one!” There are patients that with surgery we can make worse! For these reasons, knowing non-surgical management of PTTD is a good idea.

The goal of non-operative treatment is to decrease pain, increase function/activity, and avoid surgery. The candidate for stage II PTT rehabilitation must have a flexible deformity, a palpable moving tendon, and be willing to go through aggressive physical therapy.

Orthotic management is with a ¾ length molded TPE foot orthosis for those who can SSHR and have had the problem less than 3 months. Those patients who cannot do a SSHR, have had the problem greater than 3 months, and cannot walk 1 block without pain need an AFO. We prefer to use a short articulated posterior open AFO; however, an Arizona™ or solid ankle anterior open AFO can be a good alternatives depending upon the patient needs or tolerances.

Physical therapy consists of 3 Phases. Phase I evaluates the patients strengths and initiates a HEP that emphasizes not only posterior tibialis strengthening but also global strengthening of the ankle (200 reps in each direction). Phase II consists of ~6 visits focusing on isokinetic strengthening on a KinCom (or similar device) and weight-bearing exercises like toe-walking and DSHR/SSHR. Phase III repeats strength assessments of all 4 ankle muscle quadrants and patients subjective assessment of his pain. If improvement is documented, the patients undergoes four more formal therapy sessions of phase II.

Even though our goal is to go from an AFO to a FO to a supportive shoe with little or no pain, inability to do so does not mean failure. Ultimately, patient satisfaction is the goal. Some will be satisfied with wearing an AFO in order to keep working or to avoid surgery.

Suggested reading:
Marzano R: Orthotic considerations and footwear modifications following fusion techniques. Foot Ankle Surgery 2002; 1: 46-49.
Lin J, Richardson EG, Balbas J: Results of non-surgical treatment of stage II posterior tibialis tendon dysfunction, a 7 to 10 year follow up. AAOS 2007 July 13-15, Toronto, Canada.