Treatment of Heel Pain From a Multidisciplinary Approach
Disclosure

Treatment of Heel Pain from a Multidisciplinary Approach

William T. DeCarbo, DPM

Our disclosures are in the Final AOFAS Program Book. There are no potential conflicts with this presentation.
Standardize the treatment of Plantar Fasciitis with combination foot and ankle specialist and physical therapy

- Standard foot and ankle exam/tx
  - All patients were given NSAIDs, DME (Strap, Orthotic, Night splint), Injection (corticosteroid)
- Refer to P.T. 3x per week for 4 weeks
Week 1 of Therapy

- Moist Heat with pre-modulated electrical stimulation
  - 10 on/10 off with two pads placed at the mid plantar fascia and distal Achilles in a neutral position (at least 0-5 dgs of DF)
- Ultrasound 1.5 w/cm² @ continuous 100% at the plantar fascia insertion for 8 minutes
- Strumming soft tissue mobilization
- Pulstar
- Posterior STJ mobilizations to increase dorsiflexion
  - 10 times, hold for 10 seconds
- STJ distraction and medial/lateral joint mobilizations
  - 10 times hold for 10 seconds
- Low Dye taping (all patients) prior to weightbearing activities
- Temporary custom orthosis (if not already dispensed)
Week 1 of Therapy

- Correction of postural deformities including sacroiliac malalignments when necessary
- Gastroc and Soleus slantboard stretching; hamstring and hip flexor stretching
  - 3 times holding for 30 seconds
- Wall plantar fascia stretching for home and clinic- all stretches
  - held for 30 secs and performed 3 times; 3 x day (given in book)
- Ankle theraband exercises
  - 3 sets of 10 reps in DF/PF/IN/EV
- Towel curls/isometrics x 3 minutes
- Iontophoresis
  - dexamethasone and cryotherapy x 10-12 min at the plantar fascia origin/heel post exercise/treatment
Week 2 of Therapy

- Week 1 plus…
- Retro treadmill for eccentric calf strengthening x 5 min
- Eccentric heel raises
  - 3 sets of ten reps
- Core hip strengthening as per digital muscle testing
  - includes glut med and hip internal rotators when overpronating
Week 3 & 4 of Therapy

- Week 3 Therapy
  - Single leg balance activities on discs/tramp
    - 3 times 30 sec
  - Initiation of activity specific plyometrics
- Week 4 Therapy
  - Progression of all strengthening with weights and bands
  - Education on independence of home exercise program
  - Maintenance program membership at the clinic as needed
96 patients
- Mean follow up time: 30.3 months (Range 10-49; SD 12.7)
- Mean patient age: 54 years (Range 25-86; SD 12.6)
- Goals:
  - Assess improvement in symptoms of heel pain
  - Correlate these findings with the number of therapy sessions
- Pain was assessed prior to treatment and following therapy utilizing the Visual Analog Pain Scale (VAS)
- Results
  - Mean VAS prior to therapy: 6.9 (Range 1-10; SD 1.9)
  - Mean VAS following therapy: 1.4 (Range 0-8; SD 1.8)
  - Mean number of physical therapy sessions: 11.7 (Range 4-32; SD 5.9)

*Average improvement in heel pain symptoms per patient was 76.1% with 11.7 visits*
Conclusions

- We present a treatment plan for plantar fasciitis with a team approach of foot and ankle specialists and physical therapists.
- The mean improvement of heel pain symptoms was 76.1% in an average of 11.7 visits.
- Our protocol offers a predictive outcome for plantar fasciitis to offer patients with this common condition.
References

- McPoil, TG; Cornwall MW; Wukich, DK; Irrgang, JJ; Godges, JJ; Martin, RL. Heel Pain-Plantar Fasciitis: Practice Guidelines. JOSPT 2008 Volume 38, No. 4