#### SPECIAL INTEREST GROUP

#### **Message from the President**

As a second-term FASIG President, it is wise for me to ponder our current leadership and our vision. Other than an Osteo-blast announcement or our Business Meeting at CSM, I have no other means to chat with you, a member of our FASIG membership.

First, our positions of leadership are as follows:

- President-Clarke Brown
- Vice President and Programming Chair-Todd Davenport
- Nominating Committee: Stephanie Albin, JW Matheson, and Steve Pettineo

Let me just say that these practitioners and researchers collectively make a very effective leadership team for FASIG. I am indebted to their contributions. Quite naturally, the next FASIG President will come from this group of people. However, involvement on this leadership team is an exceptional opportunity, for anyone interested in foot and ankle research and treatment, to be more involved in the processes of the APTA and the Orthopaedic Section in propagating the research, and discussions that are the foundations of our profession.

Second, many physical therapists have contacted me over the past few years, for issues related to all aspects of foot and ankle physical therapy. The most common questions are related to, "how do you treat this \_\_\_\_\_?" As a result, this column has increasingly addressed protocols and treatment strategies related to common dysfunctions. This issue tackles insertional tendinitis and offers some practical exercises and treatment reminders.

Third, the most common request from our members is a platform from which the FASIG members can more efficiently and frequently communicate with each other. All of us, throughout the Orthopaedic Section, are acutely aware of this membership request and we are working on several solutions.

Fourth, our SIG's largest undertaking, the "Foot and Ankle Curriculum Guidelines for Entry-level Therapists" continues to develop. We need your input now! The latest version was first introduced at CSM and is available at the CSM portal. Short of that, contact me directly if you would like a copy or wish to discuss the content or delivery of this document. Feedback at CSM was resounding acceptance and the open-forum discussions provided many critical additions and suggestions. At CSM programming, students voiced appreciation of knowing the standards while academic instructors appreciated the reference-based information and comprehensiveness. Stay tuned as we continue developing this very important educational tool.

Finally, please don't hesitate to contact me regarding foot and ankle orthopaedic information. My contact information is provided below and I welcome your input!

> Sincerely, Clarke Brown FASIG President

#### Exercise Considerations Following Insertional Calcaneal Spur Resection Case Study: Part 2

Kaylee M. Peluso, PT, DPT

Part 1 of our Insertional Calcaneal Spur Resection case study (RK) detailed the unsuccessful rehabilitation of a patient with posterior heel pain due to Achilles tendinopathy.<sup>1</sup> Following referral for orthopedic consult, RK underwent Insertional Calcaneal Spur Resection (ICSR) and debridement. Achilles tendinopathy is common in athletes and physically active people.<sup>2,3</sup> Approximately one-third of all Achilles tendinopathies are distal and associated with retrocalcaneal bursitis and Haglund's heel deformity.<sup>4</sup>

As a result, RK was placed in a walking boot for 6 weeks and progressed from toe-touch weight bearing to weight bearing as tolerated within the boot. At this point, RK presents back to physical therapy.

#### **VISIT 1: POSTOPERATIVE EVALUATION**

Unlike previously, RK presents with minimal pain (2/10). He presented with subtalar and talocrural tightness on joint mobility testing in all directions. Strength testing, utilizing manual muscle test, revealed post-immobilization weakness of all lower leg muscles, particularly the gastroc-soleus complex, peroneals, and tibialis posterior. Gait examination revealed decreased push-off on operative foot and asymmetrical stride due to equinus.

RK's treatment program consisted of restoration of capsular mobility with mobilization and restoration of strength and ROM with exercise. A resistance band program, focusing heavily on sagittal plane movement, is begun. A slant-board for gastroc-soleus stretching (Figure 1) and "toe jams" (Figure 2) were introduced to begin stretching of the plantar-fascia, carefully dosing the intensity of stretch.

Patient management includes boot weaning, partial weight bearing with crutches, scar mobilization, and modalities for inflammatory reduction.

#### **VISITS 2 THROUGH 4**

RK tolerated all sagittal plane exercise well. We continued to implement joint mobilization, beginning at the metatarsals, working throughout the foot to the subtalar joint. These mobilizations were used to restore joint motion following immobilization.

The "Wedge" Stretch becomes very important during this phase (Figure 3). The Wedge stretch helped to stretch the lateral compartment and peroneals while encouraging rear foot inversion.

Various exercises were used to improve range of motion, balance, coordination, and proprioception (Figures 4-8). FOOT AND ANKLE



Figure 1. Slant-board for gastrocsoleus stretching.



Figure 4. Balance training on disc.



Figure 5. Balance training on bosu.



Figure 6. Star excursion balance training.



Figure 7. Stability training using mini-tramp.



Figure 8. Balance proprioception training using ladder markings.



Figure 2. Toe jams.



Figure 3. The "wedge" stretch.

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#### VISITS 5 THROUGH 8 (8-12 WEEKS POST-OP)

Proprioceptive activities are incorporated and progressed. Such activities include:

ch activities include: BAPS board Single leg stance activities Balance board, foam, discs Walking across uneven surfaces Walking lunges Wall squats Line walking Star excursion drills

Strength and power development began with weight bearing exercises at increasing intensities:

Double and single-leg heel raises Toe-heel walking Squats with weights Trampoline Hopping/jumping/landing

#### **TREATMENT CONSIDERATIONS**

After surgery, restoration of active range of motion, strength, proprioception, and gait became the focus of treatment. Secondary to the motion and strength limitations that were noted on the day of evaluation, a deliberate progression from the sagittal plane to the frontal plane was utilized. Since sagittal plane motion (dorsiflexion/plantar flexion), dominates during gait, an attempt was made to get this motion back first. With proper weight bearing restrictions, manual techniques, and therapeutic exercise, RK returned to full function without complication.

#### REFERENCES

- Peluso KM. Exercise considerations following insertional calcaneal spur resection. Orthop Phys Ther Practice. 2014;26(1):69.
- 2. Williams JPG. Achilles tendon lesions in sport. Review. *Sports Med.* 1986;3:114–135.
- 3. Orava S, Leppilahti J, Karpakka J. Operative treatment of typical overuse injuries in sport. *Ann Chir Gynaecol.* 1991;80:208–211.
- 4. Leppilahti J, Karpakka J, Gorra A, Puranen J, Orava S. Surgical treatment of overuse injuries to the Achilles tendon. *Clin J Sport Med.* 1994;4:100–107.

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Canine Trigger Point Therapy (Dr. Rick Wall) CTPT-1 Sep 5-6 (The Woodlands, TX)

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