FOOT & ANKLE

SPECIAL INTEREST GROUP

President's Corner

As the fall season approaches and your thoughts turn to the holidays, please take a few minutes to invest in your education and profession! Make plans now to attend the Combined Section's Meeting (CSM) in San Diego and/or the Orthopaedic Section's first annual meeting in Orlando. Research regarding orthopaedic foot and ankle concepts is flourishing! At both of these meetings, new research and cutting-edge rehabilitation strategies will be presented for your benefit. Even more exciting is that our Orthopaedic Section membership is leading the way! Check out the updates below and see how our profession drives the many discussions about rehabilitation! Then, contact us to play a role in furthering knowledge in physical therapy practice of the foot and ankle! You are part of our total intelligence…you have ideas no one else has considered…make your voice heard!

FASIG's Sneak Peek into CSM

Our Research Chair, Todd Davenport, has put together an outstanding program for CSM San Diego. It seems that many physical therapists at CSM enjoy talking about running, so Todd has invited Irene Davis, Bryan Heiderscheidt, and Nicole Haas to present the following program:

Thursday, January 24, 2013:

"Staying on the Right Track: Current Concepts in the Care and Prevention of Running Injuries of the Foot and Ankle."

A panel discussion will be a large part of this presentation, so bring your questions!

In addition to the program above, the FASIG will be sponsoring the following program:
Tuesday, January 22, 2013

"When Should Manual Therapy and Foot Orthoses be added to the Physical Therapy Plan of Care?"

Part 1: 8:00 AM – 10:00 AM

Part 2: 11:00 AM – 12:00 PM

The FASIG Membership meeting will follow in the same room: 12:00 PM – 1:00 PM

Curriculum Task Force

Chris Neville leads our very exciting project intended to help entry-level PT programs design and implement foot and ankle material into their orthopaedic curriculum. This huge project makes the FASIG an integral part of the process by which Physical Therapy education programs can stay current with research and clinical care techniques.

Clinical Pearl

The Peroneal Muscles: Reconciling Manual Muscle Testing (open kinetic chain) vs. Functional Strength Testing (closed kinetic chain)

While discussing the art of manual muscle testing with a recent student, our staff was quick to remind him of the importance of joint and muscle positioning during testing. Initially, the student tested the lateral compartment of the leg by asking the patient for resisted eversion, with the patient seated and the foot held at neutral. We then showed him Lucille Daniels' muscle testing manual (*Muscle Testing: Techniques of Manual Examination*, Saunders, ©1956) which demonstrated that testing of the peroneals should come "from plantarflexion." Hence, the student was reminded to carefully muscle test the peroneals by asking for eversion from a position of plantarflexion.

Daniels did not elaborate nor differentiate the two peroneal (now called fibularis) muscles, but we wanted the student to better understand how fibularis longus and brevis function. In an effort to demonstrate the function of both, particularly in a functional or closed kinetic chain fashion, we arranged for a simple heel-raise test.

A patient was asked to perform a simple single-leg, heel-raise motion, starting from a hanging position off a step (Figure 1). We asked for complete plantarflexion, urging the patient to rise as high as possible on to the metatarsal heads. We observed the very important rear-foot inversion, as represented by the line bisecting the calcaneus (Figure 2). Yet, the position of the metatarsals suggests weightbearing has moved laterally on the plantar surface, largely on the fourth and fifth metatarsal heads. It is only when the patient is reminded to place most of his weight onto the first and second metatarsal heads that the bisecting line, extending from the calcaneus through the central gastrocnemius, becomes much less (Figure 3). The calcaneus remains inverted, but now the peroneus brevis has everted the forefoot and the fibularis longus has plantarflexed the first ray. The result

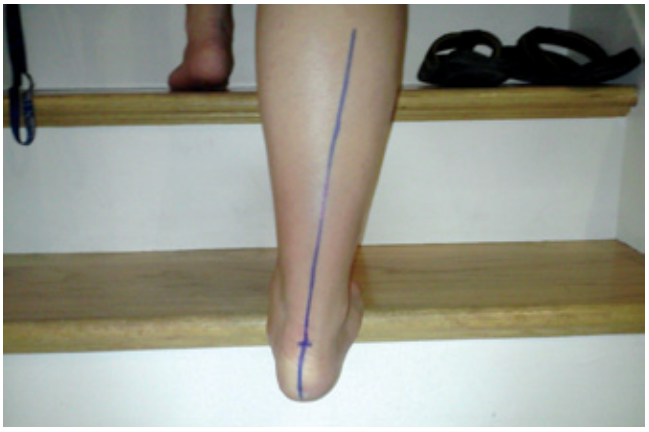

Figure 1

Figure 2

Figure 3

is medial translation of plantar pressure.

We urge our students to ask for a heel-raise test to assess plantarflexion strength. However, those patients with strong fibularis muscles will tend to stay more medial on the plantar aspect of their foot as they rise into a plantarflexed position. Similarly, we ask for functional strengthening to mimic this test, for push-off during gait requires the foot be locked at the rearfoot and the medial longitudinal arch be maintained. This phenomenon, the synergistic action of the plantarflexors and everters, can become dyskinetic with conditions that are compensated by lateral plantar weightbearing (hallux valgus, hallux rigidus, sesamoiditis, etc).

Submitted by Clarke Brown, President FASIG

The **President's Corner** and **Clinical Pearl** are regular segments of the FASIG's OPTP contribution. Please send us your clinical pearls or interesting foot and ankle case studies!

IMAGING

SPECIAL INTEREST GROUP

IMAGING EDUCATION IN PHYSICAL THERAPY PROGRAMS

As this issue lands in your mailbox we plan to have sent a survey to physical therapy education programs seeking information on imaging education. If you receive this survey, please take a couple of minutes to complete it. The information gathered will help to shape guidance on imaging content in physical therapy education.

Here's an update on some of the activities we have been working on:

- Developing an online membership directory for the Imaging Special Interest Group (ISIG). Hopefully to be up by the time you read this. Please log on to the Orthopaedic Section Web site at http://www.orthopt.org/ to preview and update the directory.
- The ISIG would like to promote standardized imaging terminology. This has been identified as a need across health care. If you have resources/references that we could disseminate, please send them to dr.white@miltonortho.com.
- Work is underway in establishing a Research Committee. We hope to have the committee formed in time for the next issue of this newsletter.
- Work is well under way in developing curriculum guidance for imaging in PT education. Dr. Bill Boissonnault is heading up this project.

DO YOU HAVE INTERESTING IMAGING INFORMATION TO SHARE?

Please consider contributing to the newsletter. Items of interest with a focus on imaging in PT practice, education, and research are welcome. Send your ideas to dr.white@miltonortho.com.

WE ARE GROWING! JOIN US!

The NEW Orthopaedic Section ISIG is growing! We are excited that so many individuals have joined our new SIG in such a short period of time. You can join the ISIG by sending an E-mail to Tara Fredrickson at tfred@orthopt.org.

Imaging Special Interest Group Officers

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(follow at: @Douglas_M_White)

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