



AOPT  **SIG**

ACADEMY OF ORTHOPAEDIC PHYSICAL THERAPY, APTA

FOOT & ANKLE



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Foot & Ankle SIG News & Updates

- Consider attending the AOFAS Annual Meeting in Vancouver (in-person or virtual options)! Dr. Erika Nelson-Wong will be presenting on physical therapist's management of individuals with nerve pain. Dr. Stephanie Albin will be presenting on dry needling and blood flow restriction interventions for individuals with foot and ankle conditions.
- Check out our new infographics on Achilles Tendinopathy (patient and clinician versions) and Recreational Footwear (<https://www.orthopt.org/content/special-interest-groups/foot-ankle/foot-and-ankle-special-interest-group-infographics>)!

The **FASIG Student Team** is looking for **students to join our team!** If interested, please contact Hayley Smitheman at hpowell@udel.edu



Member Spotlight Featuring Dr. Robert Sigler, PT, DPT

Where are you originally from?

Denver, Colorado

What type of setting do you work in?

The Jackson Clinics (TJC) in Northern Virginia

What sparked your interest in the foot and ankle?

Richard Jackson (owner of TJC) created a program where clinicians along with university professors travel to Kenya to provide education on musculoskeletal conditions at the Doctor of Physical Therapy level. In 2013, I traveled to Kenya for the foot and ankle section of the program. Upon returning, I was asked to assist in the foot and ankle course for our residency program. I realized how much I had to learn regarding the foot and ankle which led me to pursue a foot/ankle fellowship. The more I learned about the foot and ankle, the more exciting it became to see these types of cases.

How do you manage psychosocial factors related to foot and ankle pathologies?

I think this is partially dependent on each individual. However, I think it starts with education and expectations. The feet have unique injuries because they are the lowest part of our body – where gravity pushes blood and causes swelling. It is also difficult to avoid walking or standing if someone has a pain. This means it is crucial to educate on management of pathology and methods to offload. I have found pain science education, posture training, and self-relief techniques helpful to address patients' psychosocial concerns.

What is your biggest piece of advice for managing foot and ankle pathologies?

There are a few things that come to mind that really helped me get to the next level. First, understanding the importance of managing swelling as chronic swelling has a tendency to be a problem that halts progression. This naturally led to learning various methods of offloading (boot, braces, taping orthotics, cane, etc). Finally, learning to identify foot structure was a turning point (ex. rearfoot varus, forefoot varus, forefoot equinus, etc).

What other activities/hobbies do you enjoy outside of physical therapy?

I have a 4 year old boy, so a lot of my time is currently going to parks, helping him to ride his bike, and playing chase. However, I enjoy going to the gym, recreational running, and hiking.

- Andrea Rose, SPT, University of Delaware

FA SIG Updates

Member Spotlight –
Dr. Robert Sigler, PT, DPT

Psychosocial Factors
and Patient
Experiences in Foot
and Ankle Injuries

Citation Blast –
Psychosocial Factors and
Patient Experiences

Psychosocial Factors and Patient Experiences in Foot and Ankle Injuries

Psychosocial factors associated with foot and ankle pain are frequently overlooked and recent evidence suggests the need for consideration of these factors in addition to the traditional biological model when treating patients with foot and ankle pain.²

Depression and anxiety are likely to be higher in people with foot pain compared to those without.² A patient with osteoarthritis stated, "I got quite depressed with it all. I didn't realize that [...] the pain grinds you down and gives you that low self-esteem and no self-confidence. You can see other people your age doing things but you're not able to."² Conditions such as Achilles tendinopathy, plantar heel pain, and osteoarthritis result in "emotional distress, physical challenges, and a loss of self" in some patients.² The presence of depression and anxiety also result in added pain and reduced mobility in patients with diabetic neuropathy.³ Patients with signs and symptoms of depression and anxiety that elected to have a foot and ankle surgery also had poor Foot and Ankle Outcome Scores (FAOS) for symptoms, activity, and quality of life post-surgery despite having higher pre-operative expectations.⁴ The presence of depression and anxiety in addition to foot pain has compounding impact on patient satisfaction and quality of life.

Additionally, due to their foot injury and associated pain, patients display fear avoidance behaviors and as a result, reduce their activity participation.² A patient with Achilles tendinopathy explains, "There is the fear of it reoccurring ... the fear of triggering an attack prevents you from doing stuff." Fear avoidance leads to reduced activity levels and poor quality of life as patients restrict themselves in activities.² Rehab that focuses on function and pain coping strategies can be incorporated to reduce functional problems in patients with a high level of kinesiophobia.⁵

Pain catastrophizing behavior is also evident in patients with plantar heel pain, especially when taking their first step.² This behavior has also resulted in poor FAOS outcomes post-elective foot and ankle surgeries, suggesting the need to screen and address prior to surgical interventions.⁶

Healthcare for patients with foot pain can be improved through patient education and through screening for psychosocial factors including self-efficacy. Patients with Achilles tendinopathy saw improvement in their pain and function when they received evidence-based education and exhibited high levels of compliance to a high-quality exercise program.¹ Additionally, using tools such as Orebro Musculoskeletal Pain Screening Questionnaire, TSK, HADS, GAD-7 and PHQ-9 can help identify people at higher risk of poor outcomes. Interventions to address these risk factors can be incorporated in treatment to improve outcomes and quality of life for patients with foot and ankle pain.^{2, 3}

- Adwaita Bhagwat, SPT, University of Delaware

References

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2. Cotchett M, Frescos N, Whittaker GA, Bonanno DR. Psychological factors associated with foot and ankle pain: A mixed methods systematic review. *Journal of Foot and Ankle Research*. 2022;15(1):10. doi:10.1186/s13047-021-00506-3
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4. Henry JK, Barth K, Cororaton A, Hummel A, Cody EA, Mancuso CA, Ellis S. Association of depression and anxiety with expectations and satisfaction in foot and ankle surgery. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*. 2021;29(16):714-22.doi:10.5435/JAAOS-D-20-01394
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6. Veljkovic A, Gagne O, Abuhantash M, Younger AS, Symes M, Penner MJ, Wing KJ, Syed KA, Lau J. High Pain Catastrophizing Scale predicts lower patient-reported outcome measures in the foot and ankle patient. *Foot & Ankle Specialist*. 2022.doi:10.1177/19386400221093865

Citation Blast – Psychosocial Factors and Patient Experiences

Cotchett M, Bramston C, Bergin S, Menz HB, Jessup R. Lived experience of people with painful hallux valgus: A descriptive qualitative study. *Musculoskeletal Care*. 2023;21(4):1421-1428. doi:<https://doi.org/10.1002/msc.1822>

This qualitative study aimed to gain insight into how hallux valgus impacts the lives of persons with the condition. The researchers recruited 10 individuals with the condition, 9 of whom were female, and interviewed them using open-ended questions developed by the team. They then condensed the responses into common themes including the impact of hallux valgus, coping with hallux valgus, causes of hallux valgus, health professional support, and education received. The findings revealed a negative impact on health-related quality of life due to pain and embarrassment, and participants reported difficulty in finding quality educational resources about living with hallux valgus. Some participants even noted a lack of engagement and inconsistencies regarding treatment from their primary care physicians. The study emphasizes the need for comprehensive management approaches to address not only the physical symptoms, but also the psychosocial impact of hallux valgus on individuals' lives in addition to improving access to high quality educational resources.

Dismore LL, van Wersch A, Critchley R, Murty A, Swainston K. A qualitative study to understand patients' experiences of their post-operative outcomes following forefoot surgery. *British Journal of Pain*. Published online January 31, 2022:204946372110602. doi:<https://doi.org/10.1177/20494637211060278>

This article investigates the perspectives and challenges of those that underwent surgery to correct hallux valgus and/or hallux rigidus foot deformities. The researchers conducted semi-structured interviews for 15 individuals post forefoot surgery and analyzed their responses to generate 5 common themes. These included physical limitations, the psychosocial impact of surgical recovery, regaining normalcy, patients' expectations for physical recovery, and an altered body-image. Patients described a range of experiences, from successful outcomes and improved quality of life to ongoing pain and dissatisfaction with the surgery. Notably, patients who reported worse functional outcomes also reported worsening of psychological factors and difficulty returning to life post-surgery. Given the links between physical and psychosocial factors associated with recovery and outcomes, the authors recommend a multidisciplinary approach to uniquely tailor post-operative care and support to meet the individual needs of patients.

Abdalla I, Robertson AP, Tippett V, Walsh TP, Platt SR. "I'd never have that operation again" – A mixed-methods study on how patients react to adverse outcomes following foot and ankle surgery. *Journal of Foot and Ankle Research*. 2022;15(1). doi:<https://doi.org/10.1186/s13047-022-00590-z>

This study explored how patients responded to adverse outcomes following nonemergent foot and ankle surgery. Semi-structured interviews that focused on the decision to undergo surgery and the impact of the surgery on their lives were conducted. Based on the responses, the researchers identified 3 general themes: expectations, communication, and alternatives. The findings reveal a range of reactions among patients, including disappointment, frustration, regret due to the lack of discussion about what to expect after surgery, and alternate treatment options to surgery. Self-reported outcome measures focused on foot pain and disability, central sensitization, pain catastrophizing, decision regret, and health-related quality of life. Patients consistently reported persistent pain and regretful feelings toward the surgery. This highlights the importance of comprehensive perioperative counseling to ensure patients are adequately informed about the potential risks and outcomes of foot and ankle surgery to manage expectations and minimize the impact of adverse events.

Nordenholm A, Nilsson N, Krupic F, et al. Disappointment and frustration, but long-term satisfaction: Patient experiences undergoing treatment for a chronic Achilles tendon rupture—a qualitative study. *Journal of Orthopaedic Surgery and Research*. 2022;17(1). doi:<https://doi.org/10.1186/s13018-022-03103-7>

This research aimed to better understand the perspective of patients with chronic Achilles tendon rupture, considering their emotions, challenges, and long-term satisfaction with the treatment process. Group interviews were conducted with 10 participants, 4-6 years after surgical intervention for Achilles tendon repair. Experiences were organized into 4 categories: injury, diagnosis, treatment, and outcomes. The findings revealed feelings of disappointment and frustration particularly during the initial stages of treatment. Patients often faced difficulties such as prolonged recovery periods, physical limitations, and disruptions to daily life. However, despite these challenges, the study reveals that many patients reported long-term satisfaction with the outcomes, described as improvements in mobility, function, and quality of life over time. This qualitative study provides insight into the factors influencing patients' experiences, such as the importance of effective communication with healthcare professionals and setting realistic expectations for recovery.

- Tyler Arl, SPT, Rosalind Franklin University