Abstract:
With a clear shift to evidence based practice in the field of orthotics and prosthetics there is a need to establish efficacy in a commonly prescribed orthotic device, the SMO (supra malleolar orthosis). While some studies have shown a benefit with SMO use, there is limited data that clearly shows empirical evidence and efficacy with common foot pathology in adolescents, Pes Plano Calcaneal Valgum.

Patients, with a diagnosis of Pes Plano Calcaneal Valgus can be classified as flexible or rigid. When symptomatic, common symptoms range from foot, ankle or lower leg pain. The most common cause of painful flatfeet in children is the entity of hyper mobile flatfeet with tight heel cords.

The objective is to Identify Patients with a diagnoses of symptomatic flexible Pes Plano Calcaneal Valgum. Utilize a Supra-Malleolar Orthosis to correct weight bearing foot position while radiographically measuring Calcaneal pitch and Talocalcaneal angles pre and post orthotic intervention. The goal in orthotic intervention in this study is pain reduction and movement of the Calcaneal pitch and Talocalcaneal angle within normal limits.

Patients were selected that meet one of the following Criteria, pain present in the limb distal of the knee and radiographic measurements of Calcaneal pitch or Lateral Talocalcaneal angle falling out of the normal range. All patients displayed with mid foot collapse when weight bearing.

Currently we have 8 Patients enrolled and data collected and analyzed on all. This is an ongoing study and we will continue to enroll and collect the data.