Introduction: The purpose of this case study is to discuss cuboid syndrome which in the literature (Blakeslee and Morris, 1987) has been described as difficult to recognize and is commonly misdiagnosed. Cuboid syndrome is defined as a minor disruption or subluxation of the structural congruity of the calcaneocuboid portion of the midtarsal joint. The two mechanisms of injury that result in cuboid syndrome is plantar flexion and inversion injuries, which account for the majority of the cases, as well as overuse syndrome (Jennings and Davies, 2005). Anatomy: The cuboid is secured in the lateral column by numerous ligaments, specifically the dorsal and plantar calcaneocuboid, dorsal and plantar cuboideonvaicular, dorsal and plantar cuboideometatarsal and the long plantar ligament (Draves 1986). The shape and position of the cuboid is also influenced by an extrinsic muscle tendon, the peroneus longus (Blakeslee and Morris, 1987).

Method/Materials: Subjective: Patient complained of lateral pain over the right foot as well as over the cuboid bone. Patient stated that she has increase pain when walking and running to the point she has to stop the activity. Objective: Upon observation there was no swelling, redness or ecchymosis present. Foot is in a position of pes planus. Point tenderness was found over the dorsolateral aspect of the cuboid bone. AROM was restricted with inversion. Manual muscle test demonstrated weakness of inversion. Special Tests consisted of tarsometatarsal and midtarsal glide tests which were painful. Testing the midtarsal joint using midtarsal adduction test and midtarsal supination test were positive for pain. Treatment consisted of manipulation of the cuboid as well as orthotics fabricated to increase stability. The patient was placed in a prone position with the knee flexed to approximately 70 degrees. A grade III manipulation of the cuboid was performed. Foot orthotics comprising of an intrinsic cuboid pad were fabricated and given to the patient to wear daily.

Results/Discussion/Conclusion: Patient states that she is able to walk with no pain throughout the day after one week of wearing the orthotics. There have been several incidences of cuboid syndrome documented in the literature with resolution of pain and return to activity through manipulation and external support (Newell and Woodle, 1981). Cuboid syndrome responds well to conservative treatment consisting of a cuboid manipulation technique and orthotics.

References: