Background: A 19-year-old female collegiate basketball and softball player reported to the athletic training room during basketball practice complaining of tingling in her right lower leg and intermittent pressure on the lateral aspect of her foot with weight-bearing. Palpation elicited a tingling sensation down her lateral foot with no point tenderness. Patient had ipsilateral pes planus with no history of lower leg injury. Strength testing revealed normal strength with pain during resisted eversion. Patient was fully functional and returned to play with modified arch taping. Differential Diagnosis: Chronic Exertional Lateral Compartment Syndrome, Peroneal Muscle Strain, Peroneal Neuritis, Peroneal Tendonitis Treatment: Patient received conservative treatment consisting of rest, ice massage, and NSAIDs. Symptoms did not subside, so patient was referred. Orthopedist A continued conservative treatment for four weeks. Patient then returned to orthopedist showing no signs of improvement. Orthopedist prescribed iontophoresis with dexamethasone sodium phosphate 4mg/mL. After five treatments the patient developed pain over the lateral lower leg and foot, and the treatment was discontinued. The orthopedist then prescribed phonophoresis with a 10% dexamethasone gel. After five treatments, a rash formed over the treatment area and ATC was instructed to discontinue treatment until the rash decreased. When the rash cleared, five more treatments were performed and symptoms resolved. Patient was given a stretching, strengthening, and proprioception program. The patient was able to participate fully during softball season with no symptoms. The following basketball season the patient reported with a tingling sensation while stretching and jumping. Patient had normal sharp/dull discrimination. Patient was seen by the orthopedist and diagnosed with superficial peroneal neuritis. The orthopedist injected the lateral lower leg with Kenalog and the patient was cleared to return to basketball. The patient completed basketball season with pain, tingling, and hypersensitivity. During softball season, the patient sought a second opinion. Orthopedist B performed surgery to release the fascia around the superficial peroneal nerve. This relieved the patient’s symptoms temporarily but symptoms returned with activities of daily living. Patient then sought a third opinion. Orthopedist C performed a second surgery to release the nerve more distally into the foot. Two weeks after surgery the patient was cleared to begin treatment with the ATC which consisted of ROM, strengthening, and proprioception exercises. Symptoms returned, therefore patient returned to orthopedist C for further treatment. A neurectomy of the superficial peroneal nerve was performed. Postoperatively, patient complained of burning pain with superficial pressure of 4th and 5th digits for which Neurontin was prescribed. After two weeks the patient was cleared for activity with no pain, point tenderness, numbness, or tingling. Patient had decreased sensation over the incision, decreased strength and ROM. Currently the patient has no pain, edema, deformity, point tenderness and is neurovascularly intact. Strength is within normal limits and is fully functional. Uniqueness: There was not a specific mechanism of injury that would suggest neurological damage. The patient also had adverse reactions to most modalities used resulting in the failure of conservative treatment. Lastly, the patient was not affected with softball as much as basketball which could be attributed to the different playing surfaces or different sport specific demands. Conclusion: Despite insidious onset, ATC’s must correctly evaluate and refer patients when presented with neurological symptoms, as well as monitor the patient’s condition to provide the best health care possible. Word Count: 553