Background: A 19-year-old female basketball player presented with pain on the medial aspect of the right elbow. The patient was experiencing muscle spasms of the triceps brachii and forearm flexor group. Initial evaluation revealed swelling of the antero-medial forearm, tenderness of the proximal wrist flexors, ulnar collateral ligament, insertion of the triceps brachii, and cubital tunnel. Manual muscle tests of the triceps brachii, brachialis, brachioradialis, biceps brachii, and pronator teres were all at full strength. The patient reported pain during the valgus stress test and moving valgus stress test but no laxity was found when tested bilaterally. The patient reported paresthesia in her fifth digit and lateral aspect of the fourth digit. Differential Diagnosis: Differential diagnoses included medially tracking ulnar nerve pathology, ulnar collateral ligament sprain, ulnar nerve entrapment, pronator teres syndrome and anconeus epitrochlearis. Treatment: An MRI arthrogram revealed an accessory muscle originating on the medial epicondyle of the humerus and inserting on the olecranon process of the ulna. The final diagnosis of the injury was anconeus epitrochlearis. Conservative treatment protocol was implemented and included massage and Graston tools to assist with soft tissue manipulation of the triceps brachii, accessory anconeus muscle, and flexor and extensor muscle groups of the forearm. The patient receives ice with compression following daily activity. Treatments have been successful in reducing pain to a tolerable level for the patient; however pain is still consistent during daily activities. The patient is restricted from activity involving high frequency repetitions of elbow extension, such as repetitive basketball shooting, but is otherwise cleared for participation. Uniqueness: Epidemiology of anconeus epitrochlearis is unknown due to infrequency of symptomatic patients. The symptoms typically only become present in individuals with well-developed accessory anconeus muscle due to participation in activity requiring elbow extension at high frequency and intensity. Conclusions: The patient began experiencing pain, numbness, and muscle spasm in her right elbow. An MRI and physician examination concluded the diagnosis of anconeus epitrochlearis. The patient experiences consistent pain in the medial elbow, distal triceps, and proximal forearm flexor muscles but is fully participating in basketball. Consistent with research presented by Tiong and Kelly (2012), regular treatments using Graston tools, massage, and preventative taping are administered prior to activity as needed to manage pain. Relevant Evidence: Research presented by Tiong and Kelly (2011) and Dekelver, Glabbeek, Dijs, and Stassjns (2012) state anconeus epitrochlearis as a leading cause of ulnar nerve entrapment and associated neural symptoms. Although excision surgery is presented as a treatment form by Tiong and Kelly (2011), conservative treatment to include splinting, therapeutic exercise, and possible cortisone injections should be administered prior to surgical intervention (Dekelver et al., 2012). Word Count: 511