

Apple

THERAPY SERVICES

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Every few months we have introduced you to our athlete of the month. While in the past we have chosen a local high school athlete, this month we report on the success of a local triathlete. This is another reminder to keep the goals of all ages in mind when treating their injuries. Cheers! - Karin Biskovich, MPT and Laura Jackson. DPT. ATC

WHAT'S NEW AT APPLE THERAPY

COMEBACK ATHLETE OF THE MONTH

Brandon Weinert of Apple Therapy Amherst

Injury: Proximal Fibula contusion and MCL sprain

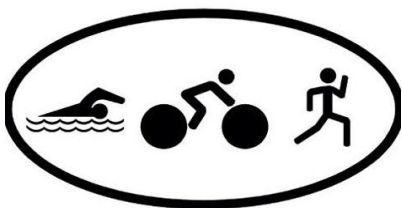
Physician: Dr. Daniel Bouvier, NHOC

Physical Therapist: Karin Biskovich, MPT, Apple Therapy Amherst

Brandon's Story:

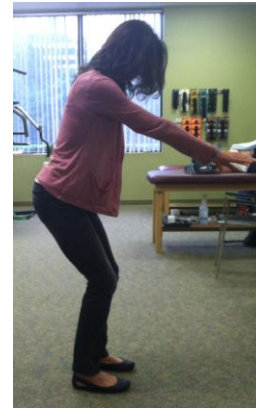
Brandon came to Apple Therapy Amherst after he fell and twisted his knee. He had significant swelling and loss of range of motion. Brandon was signed up to participate in an Olympic distance triathlon in June and was not able to tolerate any activity or training due to his pain level. Therapy was focused on decreasing his swelling and recovering his range of motion and within a few weeks he was able to resume light activity to initiate his training. Three months after injuring his knee, Brandon completed the triathlon and placed 2nd in his age group (his first ever podium finish!).

We wish Brandon a successful triathlon season!



THIS MONTH IN PHYSICAL THERAPY

Last month a study by Powers et al. in the *Journal of Orthopaedic and Sports Physical Therapy* evaluated stress on the patellofemoral joint with quadriceps strengthening. The study involved 10 participants with no history of knee pathology or trauma, current knee pain or effusion, and no knee pain with activities of daily living or recreational activities. The participants performed a weight-bearing squat and a non-weight bearing knee extension exercise with variable resistance. When determining the resistance for the non-weight bearing knee extension researchers choose a resistance that would simulate a similar demand of the quadriceps as the squat demanded. The force measured during these exercises showed the force exerted on the patellofemoral joint during a squat was greatest in between 45 - 90° of knee flexion, and during the non-weight bearing knee extension the force was greatest at 0 - 45° of knee flexion.



The study's results conclude that in order to reduce the stress and pain in the patellofemoral joint when strengthening the quadriceps in a patient with patellofemoral joint pain a weight-bearing squat should be performed within 0 - 45° of knee flexion, and a non-weight bearing knee extension with a force around the ankle should be performed within 45 - 90° of knee flexion. Restricting range of motion when performing quadriceps strengthening can improve strength while keeping pain levels at a minimum.