## **Myofascial Trigger Point Articles**

Three Balls, Two Strikes, One Knee

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Full count, bottom of the ninth and the score was tied. Poised, ready for the next pitch, Joe couldn't help wondering if his right knee was going to buckle as it had in the past. Was his knee pain going to rear its ugly head and prevent him from running the bases? Would he even get the chance to run?

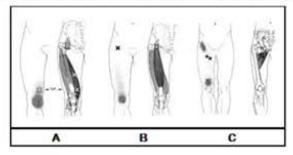
The pitch was right in the zone and resulted in a long fly ball to center field. Joe was in luck. A series of mishandled relayed throws enable him to run all the way home. As he neared home plate, the signal was slide. And slide he did! "Ouch", two days later and the knee pain that only flared up once in a while now became constant. The pain was threatening his reputation as the neighborhood baseball hero.

After two weeks on the bench with his two old friends, ice and Ibuprofen, Joe realized this was more than just a bump on the knee. His doctor said it was a muscle injury and gave him a prescription for muscle relaxers, pain medication and an anti-inflammatory.

Another week of no relief and Joe was suffering baseball withdrawal. On the recommendation of a friend, he came to MyoRehab for a consultation. When asked about the history of his right knee pain, we learned it began a few months after his car accident two years ago. It only bothered him "now and then".

Joe had long since settled his case and thought the knee pain would go away in time. It didn't. He related the story of his car accident. While stopped for a light he was rear ended. At the moment of impact, Joe jammed on the brakes to prevent hitting the car in front of him.

During this unaccustomed overload, Myofascial Trigger Points (MTrPs) developed in the thigh



muscles. MTrPs are hypersensitive points in muscles that when stimulated produce pain that is referred in a predicable pattern away from the Trigger Point.

The MTrPs in Joe's thigh muscles had become latent. Latent TrPs produce pain only with exertion or fatigue. This explains why the pain wasn't constant. When Joe slid into home plate, he ended up with more than a home run. He reactivated an old injury which was

never completely resolved.

When Joe came in for his initial appointment, an in-depth evaluation revealed two muscles as the possible cause of his right knee pain. The vastus medialis (Illustration A) not only causes knee pain, but has a reputation as the "quitter" due to its ability to cause Buckling Knee Syndrome.

Another primary producer of deep knee pain, the rectus femoris (Illustration B), attaches to the knee cap (patella) at one end and the hip at the other where the MTrP is found. This muscle is often overlooked for knee pain because the trigger point is so far from the pain.

After successful treatment, his knee pain was substantially reduced. Joe was given a Home Exercise Program to maintain the gains achieved during his treatments. Since he was doing well, he was told to come back in two weeks for a final evaluation.

Before the allotted time expired, Joe was back. The knee pain had returned. Walking into the waiting room to greet Joe, the cause of his pain became apparent. He was sitting with his right ankle resting on his left knee.

In this position, Joe was stretching his adductor muscles (Illustration C) causing MTrPs in that muscle group to activate. The adductor brevis and longus produce pain similar to the vastus medialis and rectus femoris. Because these muscles are not located near the knee, they too are rarely thought of as muscles capable of producing knee pain.

Joe's Home Exercise Program was modified to include the adductors. We also discussed perpetuating factors. These are typically postural distortions or activities that can reactivate MTrPs. A review of Joe's seated posture and his workout routine at the gym gave us ample opportunity to eliminate perpetuating factors.

Is there a knee holding you back from being the neighborhood hero? Are old injuries coming back "now and then"? Give us a call at MyoRehab.