

## SET TALK

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### KNEE PAIN AND STRUCTURE

Jim, a 63 year old college teacher and ballroom dancer, was referred to me by a former client for knee problems. Over the last several years his knees had become inflamed and swollen after long weekends of steering the ladies around the dance floor. He had been to several orthopedic surgeons, had MRI's done, and dye injected into the knee, but there was no diagnosable orthopedic problem. The orthopedic physician told him that he had arthritis and normal wear and tear on his knees for a man of his age, and that if his symptoms worsened he could scope it to remove the minor bits of calcium that were evident. However, he did not see this as a significant problem, and couldn't understand why the swelling and inflammation continued to be a problem.

Sandra, a 20 year old marathon runner, started her heavy training schedule six weeks prior to the Boston Marathon, and developed sharp pains in the medial side of her right knee after running seven or eight miles. An orthopedist evaluated her knee with MRI's and x-rays. He said there was no structural damage, diagnosed her with patellar tendonitis, and put her on an anti-inflammatory. He told her to rest her knee which would mean she would not be ready for the Boston Marathon. She scheduled a session hoping I could help her.

Ralph, a 44 year old car salesman, was 50 lbs overweight, and was referred to me by his physical therapist after he had his right knee scoped for a torn cartilage. He finished a series of physical therapy sessions but was still unable to spend a full day on his feet without severe pain in his knee. Usually, his knee was okay in the morning after resting all night, but the pain returned when he was on his feet for several hours.

These are three cases of knee problems that I treated in the last year. Each case was unique in age and condition of the client, severity of the problem, and treatment and diagnoses that were given by healthcare professionals. Obviously, each case presented challenges. For my treatment to be successful, I needed to identify the core problems and treat from that basis.

Each of the clients was in a structural collapse of the core distortion which had either caused the knee injury, or was creating an irritation within the knee due to the imbalance. When there is a structural collapse of the core distortion, the leg on the side of the anteriorly rotated ilium is longer, and the leg on the side of the

posteriorly rotated ilium is shorter. This creates an imbalance in the distribution of body weight down through the legs, and a distortion within the hinge of the knee due to the relationship of the knee and lower leg caused by the rotation of the iliums – i.e. to compensate for the leg length discrepancy the knee and lower leg tend to be rotated in opposite directions.

Jim kept himself in good shape throughout his life, and it had taken 63 years for his body to fall into a structural collapse of the core distortion. Even though he was in good shape, his constant vigorous dancing routine pushed him beyond his ability to maintain structural balance contributing to his structural distortion. Aging had caught up with him, and the initial imbalance within the knees from the core distortion was increasing with the years of wear and tear on his knees causing greater stress on his knee joints. As he continued dancing and had more time to take additional lessons, his knees were getting worse to the point of developing arthritis. When I viewed the x-rays, the arthritis was minimal but there definitely was evidence of wear on the cartilage in each knee. On his left knee the lateral cartilage was more worn down, and on the right knee it was the medial cartilage that showed the most wear. This was synonymous with the weaknesses found in the knees when the imbalances of the core distortion are left untreated.

Sandra, the 20 year old marathon runner, was young, strong, and in excellent shape. However, the excessive training and pounding her body had undergone during the miles of running had worn her down. When she trained into exhaustion, she was reaching the point where her body was collapsing further into the core distortion due to the inability of the core muscles to keep her balanced under the heavy load. This was showing in her body with an increase in her scoliosis (structural collapse of the core distortion of the spine) and the resulting increase in the anterior / posterior rotation of her iliums. As with Jim, this was causing more of an imbalance in her knees, specifically the medial side of her right knee. Her vigorous training regimen was pushing her past the point of being able to maintain appropriate knee structure causing severe irritation and binding on the medial side of her right knee. In addition, the quadriceps muscles were tightening up to counter the weakness in her knee and were actually causing the inside of the patella to be rubbing against the bone and cartilage of the knee joint.

Ralph, the 44 year old car salesman, had been overweight most of his adult life and had done little to maintain the condition of his body. He had a significant structural collapse of the core distortion and indicated back and neck problems in addition to his right knee

symptoms on his intake form. He had experienced knee symptoms for some time and his knee had weakened to the point that the medial cartilage on the right side had torn during a twisting motion while carrying a suitcase. He had surgery to repair the cartilage and physical therapy to strengthen the leg and knee. However, he was still in pain and not progressing with his physical therapy. Even though he had successful surgery and physical therapy, his knee was still imbalanced in the structural collapse of the core distortion and unable to be fully rehabilitated.

Obviously, my first goal was to release the structural collapse of the core distortion by moving the iliums into balance to take the pressure off the stressed areas of the knees. The quickest and most direct way to accomplish this was to apply Cranial/Structural releases that release the iliums into alignment and give weight bearing support to the sacrum. This also initiates an unwinding of the myofascial holding patterns affecting the entire leg and the structural imbalances of the knees. Once these changes were initiated it was time to apply effective soft tissue treatment.

The challenge was to apply a soft tissue protocol that would maximize the release of structural imbalance and allow the knee and leg to support the body in balance. This required knowing which leg was long due to the anteriorly rotated ilium, and which was short due to the posteriorly rotated ilium. This was accomplished by structural assessment while the person was standing. Locating the ASIS of each ilium showed me which was rotated anteriorly as it was lower than the one that was rotated posteriorly. Also, viewing the client from behind it was easy to see that the PSIS on the ilium that was rotated posteriorly was lower. The gluteus maximus was more defined on the side of the posteriorly rotated ilium, and there was a shortness between the crest of the posteriorly rotated ilium and the floating rib. This gave me the information necessary to effectively address and release the myofascial holding patterns causing the distortions affecting the knees.

Using the 3-step approach - *(1. release the ischemia, inflammation, and swelling, 2. release the myofascial holding pattern working with deep, broad, slow strokes that only move with the release of the tissue, 3. release individual fibers, adhesions and scar tissue with deep very specific strokes also moving only with the release of the tissue)* - I was able to work effectively and deeply from the first session with each of the above clients.

Jim's initial treatments focused on moving the structural collapse of the core distortion into balance by releasing the iliums out of rotation into weight bearing support for the sacrum. This required applying a different protocol

on the left side (anterior rotation) than on the right side (poster rotation). It was interesting to note that the majority of Jim's knee problems disappeared in this process. After two sessions to accomplish the pelvic balancing, I then concentrated more directly on the knees. Jim's left knee had more of an imbalance and binding on the lateral side with his lower leg and foot turned out. I focused on the lateral side of the lower leg and knee and Jim reported a total cessation of symptoms. His right knee had more tension on the medial aspect down through the inside of his leg into his arch. On this side I focused on those areas, and after this session Jim reported no symptoms in his right knee. By paying attention to the differences in the legs from the anterior / posterior rotation of the iliums, I was able to effectively restore support and release the strains from Jim's knees which allowed him to resume his active dancing social life.

Sandra, like Jim, was in a structural collapse of the core distortion, so that was where I started. In the process of bringing the anterior/posterior ilium rotation into balance I also treated the quadriceps of her right leg. After two sessions Sandra reported about 1/3 of the intensity of the symptoms in her right knee. I then addressed the lower leg relationship to the knee along with the quadriceps, medial side of the knee, and the inside of the leg, ankle and arch. After that visit Sandra was able to resume training. I focused more specifically on the connective tissue around the knee in her last session, and Sandra was able to run her marathon.

Ralph had been in the structural collapse of the core distortion for some time and was overweight. With these two factors, it took longer to balance the anterior / posterior rotation of the iliums. After five sessions he reported less pain in his knee. He also noted improvement in both his back and neck. Now he was able to increase strength and range of motion in his knee during the physical therapy sessions. I then focused on the right knee, quadriceps, adductors, hamstrings, and inside lower leg. When this all released, Ralph reported no more pain and full range of motion.

From these three cases it is evident that we need to view the core distortion when treating knee problems. The influence of the structural collapse of the core distortion on the knees usually results in either injury or pain. It is only by releasing this distortion into balance and weight bearing support that we can take the stress off the knees and facilitate full rehabilitation for our clients long term.