

**Feature Commentary****MCKENZIE INSTITUTE CHIROPRACTIC BRANCH***JONATHAN R. SOLTYS, DC, MS, CERT. MDT**EXECUTIVE DIRECTOR*

The McKenzie Institute International launched the Chiropractic Branch in 2014. It was the first Branch designated specifically for a health care profession versus a country. The Branch was created to further the Institute's mission of providing training to qualified health care professionals to better serve the public. In a number of countries around the world, there are inherent challenges with allowing chiropractors to attend a country branch's credentialing courses. In addition, in many jurisdictions, the Branches are unable to provide continuing education credit (for license renewal) for chiropractors.

From 2008-2013, MII allowed Parts A & B courses to be offered to the chiropractic profession as a beta test in association with the National University of Health Sciences, located in Illinois (USA). The courses were taught by Steven Heffner, DC, Dip. MDT in an identical fashion to the teaching methods used for all McKenzie Institute USA courses. It was after this period that the Chiropractic Branch was formalized.

The Chiropractic Branch's instructors and assistants have a unique understanding of a chiropractor's background education, post-professional education, nomenclature utilized, manipulative & manual therapy techniques, philosophies, continuing education requirements and the different scopes of practices. The profession has in excess of twenty named chiropractic techniques and each one utilizes a different assessment method and incorporates different terminology. Our instructors are able to bridge any divide in conceptual understanding, which accelerates the attendee's understanding of the foundational MDT information.

MDT courses worldwide are typically held in consecutive 3 or 4-day formats and utilize weekdays. This standard format presents challenges for chiropractors since the vast majority are in solo practice and weekday attendance would result in a significant loss of business. As a solution, the Chiropractic Branch offers most of its courses over two weekends i.e. Saturdays & Sundays, and does not incorporate weekdays. In addition, the Part A & B courses begin at 1:00pm on Saturdays so chiropractors have time to practice or travel to the course Saturday mornings versus Friday afternoons or evenings.

As we continue to increase awareness of MDT to chiropractors worldwide, a growing number are pursuing MDT training. However, the Chiropractic Branch simply cannot offer enough courses to accommodate all chiropractors that have interest and we do not have the capacity to offer the advanced courses in any great number. We recommend to chiropractors that it is helpful to complete at least Part A with our Branch but if we cannot provide the next course in a suitable time frame, we encourage them to enroll with the respective country Branch, which many have done. Where permissible, we rely on the country Branches to serve these individuals especially with the advanced courses so they can continue their MDT training. While some already have, a number of Branches should see their chiropractor enrollments begin increase over time.

In addition to working with various chiropractic organizations, one of our Branch's strategies has been to collaborate with Chiropractic Colleges or Health Sciences Universities that have a chiropractic program. Thus far, the Branch has offered MDT courses on five U.S. campuses and it is in discussions with three additional institutions at this time. This has led to introductory information about MDT being included in the core curriculums of three institutions. Each of the faculty that are teaching this introductory material are in the process of completing their credentialing in MDT. After students attended their curricular class with the introductory information, a sizable percentage enrolled in the MDT courses (these students are in the clinical practice phases of their education). Two other institutions have indicated that they would like to begin offering the same introductory material in their curriculums as well. Recently, we've received requests from students who have completed MDT courses to develop a club on their respective campuses in support of MDT. The details of this are still being explored but this could create even more awareness and likely drive even more students to the courses.

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The following comments have been repeatedly reported by chiropractors

that completed MDT training:

*“MDT offers safe and effective treatment protocols with patients that are in too much pain or have contraindications to the utilization of manipulation or other manual methods.”*

*“There is far less physical stress utilizing MDT in comparison to other spinal or extremity techniques. This has helped protect our shoulders, low back, wrists and thumbs (these regions are responsible for the greatest amount of disability amongst chiropractors).”*

The number of MDT credentialed chiropractors has now grown to over 120 in a short time frame.

The Chiropractic Branch looks forward to working with many country Branches as time progresses.

### **Branch Administrator**

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### **About the Branch Administrator:**

*Jonathan has spent his professional career both in the academic and clinical settings. From 2003-2013, he served as the Dean of Postprofessional, Graduate and Continuing Education at the National University of Health Sciences, which is located in Illinois (USA). He developed numerous continuing education (CE) programs that were attended by thousands of health care professionals each year. He expanded the university's CE offerings to include medical physicians, physical/occupational therapists & assistants, acupuncturists, naturopaths and massage therapists. During his tenure at the university, he was promoted to the rank of Associate Professor. He taught courses in clinical orthopedics, joint manipulation as well as medical-legal specialty lectures since being hired in 1994. In his 20 years of teaching experience, he's received ten awards for teaching excellence.*

*Concurrently, he practiced as a chiropractor in Illinois in multi-specialty clinics. During that time he gained invaluable experience collaborating with various health care specialists in working with patients suffering from chronic pain conditions.*

*He completed his undergraduate studies at the University of Waterloo Ontario, his chiropractic degree at Logan College of Chiropractic, and his post-professional Master of Science degree in Advanced Clinical Sciences at National University of Health Sciences. The focus of the Master's degree was the prevention and management of chronic disease processes. He's completed over three thousand hours of continuing education training over various topics and is credentialed in Mechanical Diagnosis & Therapy. In 2014, he was appointed as the Executive Director of the Chiropractic Branch of the McKenzie Institute International.*

**CASE REVIEW: A CLINICIAN'S PERSPECTIVE****Management of a Hip Derangement presenting with a positive Flexion Adduction, Internal Rotation (FADIR) Impingement Test***Andrei Altavas, PT, Cert. MDT*

Hip joint pain is a common symptom that frequently causes patients to seek consultation in physical therapy. A variety of diagnostic labels for hip joint pain have been used by primary care physicians, such as osteoarthritis, trochanteric bursitis, labral tear, hip strain and hip pain. The Orthopedic Section of the American Physical Therapy Association established Nonarthritic Hip Joint Pain Clinical Practice Guidelines (CPG) linked to the International Classification of Functioning, Disability and Health. The purpose of these clinical guidelines is to describe evidence-based physical therapy practice, including diagnosis, prognosis, intervention, and assessment of outcome, for musculoskeletal disorders commonly managed by orthopedic physical therapists. Diagnoses of nonarthritic hip joint conditions are made by clinicians based on a combination of imaging and clinical findings, although there is no consensus on the diagnostic criteria to rule in or rule out a specific condition.

This is a case of a 56-year-old female patient referred by her primary care physician for R hip pain. The patient presented with a sudden onset of anterior hip and groin pain after a spinning class (cycling). She stated her symptoms had been present for three months and remained unchanged. The patient's hip pain was intermittent and was worsened when she crossed her leg, performed a squat, and when sleeping at night without a pillow between her legs. Her lumbar spine was unremarkable during assessment. Examination using repeated movements of the hip was worsened in flexion, internal rotation and adduction. This finding is described in the CPG as pain reproduced with the Flexion-Adduction-Internal Rotation (FADIR) Impingement Test which is suggested to be indicative of an intra-articular injury when correlated with imaging findings. The FADIR test is used to assess a painful impingement between the femoral neck and acetabulum in the anterior superior region. It has also been used to assess for specific pathology of the acetabular labrum, and diagnosis of femoroacetabular impingement. The FADIR test was studied for its diagnostic utility and has a specificity of 0.10 and sensitivity of 0.78.

A directional preference to hip extension was established on the first day, as this slightly reduced the patient's symptoms upon retesting her chief complaint. She was able to cross her leg with less pain but groin pain during squatting did not change. The patient returned for her second visit two days later reporting that crossing her leg was now pain free but she continued to have pain when sleeping at night. Likewise, squatting reproduced her groin pain. Repeated hip internal rotation was performed with the patient's leg on a 4-inch high foot stool. The patient's anterior hip and groin pain was reproduced but was decreased with repetition. Retesting her ability to squat was performed with less pain.

The patient was seen for her third visit a week later and reported that her symptoms were 90% better and her hip pain was abolished when she crossed her leg and during squatting. She also reported her pain at night was significantly reduced. Repeated movements of the hip were retested and were now full and pain free during flexion, adduction and internal rotation. However, a combined motion utilizing the FADIR Impingement Test and an inner quadrant scour test was painful and was made worse with repetition. Force alternatives were explored accounting for the patient's symptom response by adding more flexion to repeated internal rotation. The movement was performed with the leg on a chair. She was instructed to add overpressure to repeated internal rotation.

At the fourth visit, the patient reported full resolution of her symptoms during squatting and at night. She was hesitant to return to bicycle riding and spinning class due to fear that her hip pain would return. The FADIR Impingement Test and a hip scour test were performed and did not produce pain. The patient was instructed to continue her reductive exercises at home as needed.

This case highlights the importance of Mechanical Diagnosis and Therapy (MDT) in the management of nonarthritic hip joint pain. Therapeutic interventions such as joint mobilization, manipulation, neuromuscular re-education and stretching are recommended by the Clinical Practice Guidelines when patients demonstrate physical impairment measures consistent with a patho-anatomical diagnosis. Future recommendations using directional preference exercise and management utilizing the patient-response model are merited.

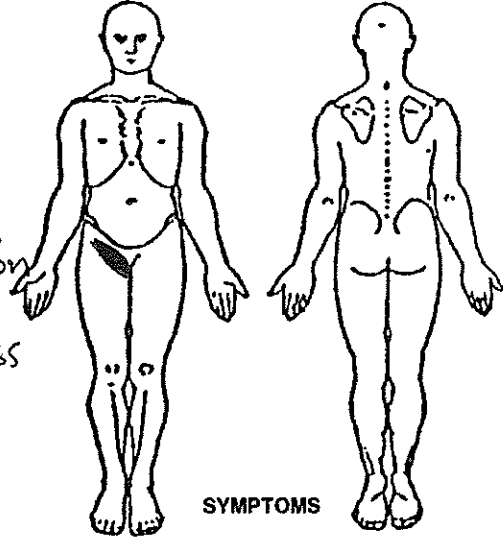
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3. Narvani AA, Tsiridis E, Kendall S, Chaudhuri R, Thomas P. A preliminary report on prevalence of acetabular labrum tears in sports patients with groin pain. *Knee Surg Sports Traumatol Arthrosc.* 2003; 11: 403– 408.



# THE MCKENZIE INSTITUTE LOWER EXTREMITIES ASSESSMENT

Date \_\_\_\_\_  
 Name Mrs. Hip Sex M  F  
 Address \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Date of Birth \_\_\_\_\_ Age 56  
 Referral: GP / Orth / Self / Other Family MD  
 Work: Mechanical stresses Office administration  
6-8 hours/day  
 Leisure: Mechanical stresses Cycling, spinning class  
 Functional disability from present episode \_\_\_\_\_  
 Functional disability score \_\_\_\_\_  
 VAS Score (0-10) 5/10



## HISTORY

Present symptoms R hip anterior / groin  
 Present since 3 months Improving / Unchanging / Worsening  
 Commenced as a result of cycling, spinning class Or No Apparent Reason  
 Symptoms at onset anterior hip / groin Paraesthesia: Yes / No  
 Spinal history back pain 1 yr. ago; resolved Cough / Sneeze +ve / -ve  
 Constant symptoms: \_\_\_\_\_ Intermittent Symptoms: hip / groin

**Worse** bending sitting / rising / first few steps standing walking stairs squatting crouching  
 am / as the day progresses / pm night when still / on the move Sleeping: prone / sup / side R/L  
 Other uses a pillow between legs when sleeping; crossing leg  
**Better** bending sitting standing walking stairs squatting / kneeling  
 am / as the day progresses / pm when still / on the move Sleeping: prone / sup / side R/L  
 other no pain with all other activities or positions except  
above.

Continued use makes the pain: Better Worse No Effect Disturbed night Yes / No  
 Pain at rest Yes / No at night when not using a pillow Site: Back Hip Knee / Ankle / Foot  
 Other Questions: Swelling excessive Clicking / Locking none Giving Way / Falling none

Previous episodes none  
 Previous treatments none  
 General health Good Fair / Poor \_\_\_\_\_  
 Medications: Nil NSAIDS / Analg / Steroids / Anticoag / Other \_\_\_\_\_  
 Imaging: Yes / No \_\_\_\_\_  
 Recent or major surgery: Yes / No \_\_\_\_\_ Night pain: Yes / No if leg not supported  
 Accidents: Yes / No \_\_\_\_\_ Unexplained weight loss: Yes / No \_\_\_\_\_

**Summary** Acute / Sub-acute / Chronic Trauma / Insidious Onset  
 Sites for physical examination Back Hip Knee / Ankle / Foot Other: Sudden onset after spinning  
R Class







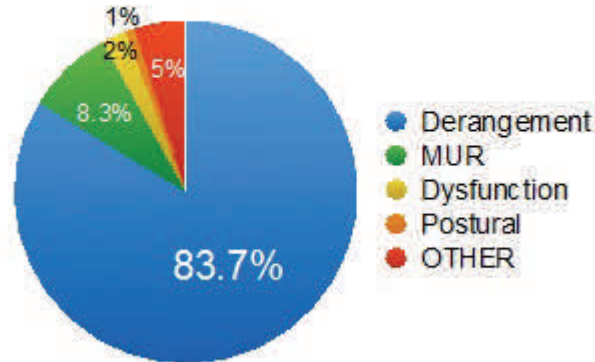






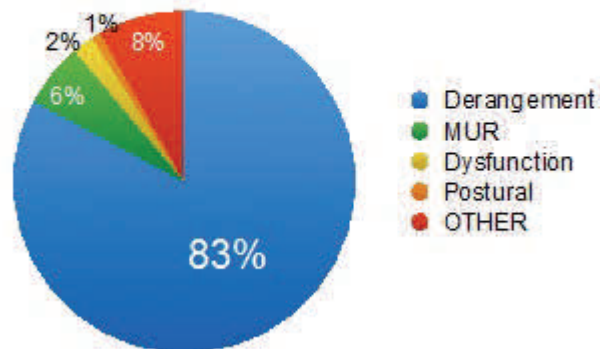
At the initial visit, the proportion classified is shown below. As can be seen, the proportion of patients classified as Derangement is encouragingly high, despite the fact that more than 40% of the patients had a history of greater than three months. (Note: With the recent change in terminology, 'irreducible derangements' are now termed Mechanically Unresponsive Radiculopathies (MUR).)

### Classification on initial visit



Concerning the consistency of classification over five visits, only 5.57% of Derangements were reclassified in another subcategory, mostly MUR (26.5%) and OTHER (20.6%). On the other hand, 50% of MURs were reclassified, most of them as Derangements (29.4%). The proportions by the fifth visit are shown below:

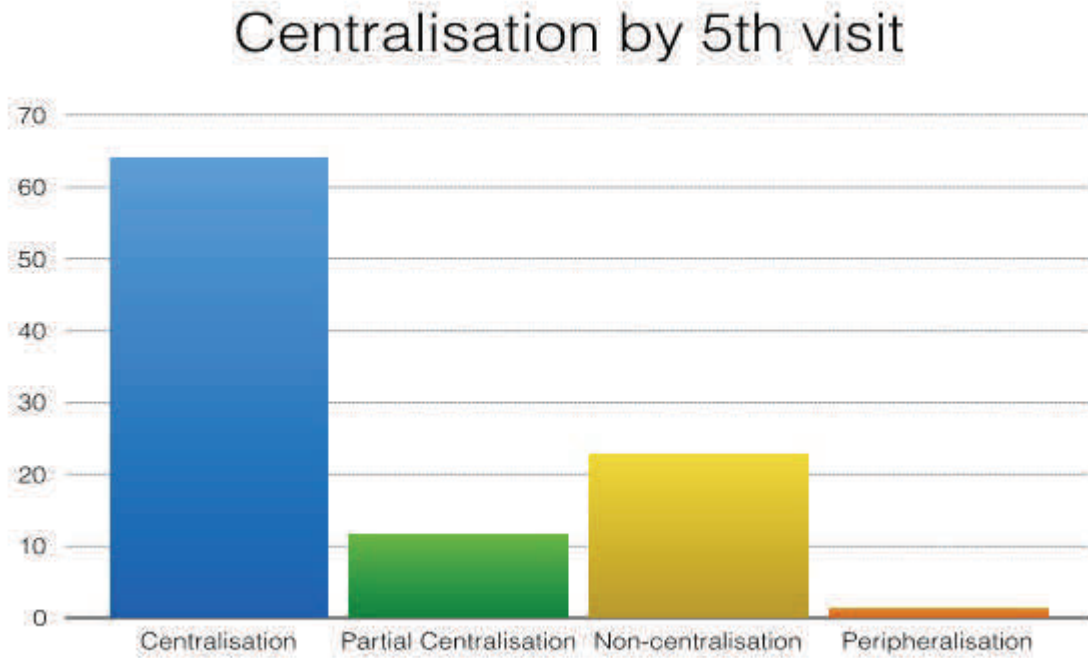
### Classification by 5th visit



For Derangements, extension was the most frequent DP (79.5%), followed by lateral (15.1%). A DP for flexion was observed in only 5.4%. During the initial visit, centralization was observed in 50.1% and partial centralization in 20.3%.

For the consistency of observation of DP, the overall prevalence rates varied only marginally over the five visits. However, the DP changed from one spinal movement to another in a total of 26.5%. The authors describe a total of 24 such changes; the most common change was from a DP for pure sagittal extension to a DP for extension with hips off center (18.7%). In 9.9% no DP changed to a DP for extension, and conversely, in another 9.9% a DP for extension changed to no DP.

Concerning the prevalence of centralization, by the fifth visit, the breakdown is shown below:



So, what are the Implications for the MDT clinician? While this study confirms the prevalence rates observed in other studies, the prevalence rates of the various reclassifications and their detailed descriptions adds interesting new information to the current literature and informs clinical practice. It substantiates the importance of continuous re-assessments in order to confirm a provisional diagnosis and to guide management. Indeed, clinicians should not hesitate to test and confirm appropriate management over a few visits in order to thoroughly assess challenging clinical presentations.

<http://doi.org/10.1016/j.kine.2013.10.009>

## **BUSINESS & MARKETING CORNER**

### **MDT and the Gym**

*Yoav Suprun, DPT, Dip. MDT, CSCS*

It is time. It is time for us to help those who want to stay fit, exercise and, most importantly, prevent injuries in the process.

Not a week that goes by in the clinic where I'm not asked "What do you think I should do? Elliptical machine or bike? Run or use the rowing machine? Use weights or body weight? Pilates or yoga? Upright bike or recumbent bike? Treadmill or stair master?" And the list goes on and on...

I'm sure you experience the same frustration I feel when personal trainers, Pilates, yoga, spinning instructors etc., "interrupt" the healing process we try to achieve with our patients. The work we have done to help patients find Directional Preference and achieve Centralization is lost at times.

I often tell my patients that they can't expect that in a room filled with 20-30 people the instructor will correct their form or that their personal trainer will help "stretch" their pain away. Even if they do adjust, stretch or modify the weight (as I did for years as a personal trainer), it may not work and there is the possibility of injury. We need to teach our patients to be responsible for their mechanical setup, movements and symptoms.

MDT assessment and treatment allows us to help patients find what will work best for them when they exercise. As we know, not every exercise is appropriate!

This recent [NY Times article](#) is yet another example of the broad generalizations that are often reported by media outlets describing how the fitness industry, or any exercise, can help solve aches and pains. Further, it quotes a lead researcher, suggesting an example of "an effective back-exercise program" in a 1991 study published in *Physical Therapy* that shows a [full regimen of exercises](#) that aren't necessarily sensible for everyone.

Since fitness trainers cannot take our MDT courses, patients have to be the ones in control! We need to teach our patients what the average gym member doesn't know. Most importantly, patients need to be proactive in knowing that not everything they read about will work for them.

So, what is the solution? Create an educational talk in your community that will allow the public to know how you can help them stay healthy and fit. MIUSA recently videotaped the [patient presentation](#) I have used for years, and I welcome you to use it as a guide to help you create your own community talk.

Consider finding a way to get the message across to gym members in your vicinity. "DO NOT CHOOSE JUST ANY EXERCISE". We can help find the ones that will work best for YOU!

Good luck!