

FEATURE COMMENTARY**“Patients Come First—Exploring Optimal Care”: A Closer Look at the 14th International Conference in Mechanical Diagnosis and Therapy**

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Late September 2017 found many clinicians from around the world convening at the 14th International Conference in Mechanical Diagnosis and Therapy in California, USA. The conference kicked off on a beautiful, crisp, sunny day in San Francisco.

Welcoming remarks by Lawrence Dott, CEO of the McKenzie Institute International, and an official opening of the ceremony by Dr. Todd Wetzel, Conference Chairman, preceded Friday afternoon’s session entitled “Ensuring Optimal Care for Low Back Pain: Surgery or Not”. In this session, George Supp set the stage with his look at the persistent rising costs of low back pain and the need for consensus between practitioners in the management of patients. From there, we began the journey of one such patient, Betty, through four presentations.

Our first stop was with Mark Werneke’s examination into the usefulness of MDT and prognostic indicators, such as Centralization and psychosocial measures, to determine the progress of a patient. He reported such measures should be collected serially throughout a patient’s treatment and to also, “... consider both Centralization and mental factors in a patient. Even if they centralize, that may not change fear.” (Werneke et al. 2009) He advised that in patients like Betty, where fear may be a factor in their lack of improvement, to utilize a graded exposure approach to return them to full functioning. In the case of Betty, she was progressively reintroduced to biking, both in the clinic and at home. When her patient reported outcome measure (PROM) was repeated, her score increased as had been expected but not seen with Centralization. Hans van Helvoirt then presented on what to do when MDT fails. He reported that there is evidence to support combining TESI with MDT, creating good short and long-term effects as compared to short term effect with ESI alone (Van Helvoirt 2014). Following that, Dr. Tamar Pincus discussed which patients shouldn’t have surgery, how to tell them, and how to advise these patients that they’re not going to get better with surgery. Dr. Todd Wetzel rounded out the panel with his discussion of who really needs surgery and reported fusion is not supported for the treatment of axial spine pain and that an optimal invasive strategy has not been identified for axial spine pain.

Dr. Helen Clare presented on classification systems and noted that the NIH Task Force recommends subgrouping patients based on the impact that chronic low back pain has on the patient (Deyo et al. 2015). They have suggested subgrouping the patients based on the pain intensity, the functional status, and the pain interference on daily activities (Deyo et al. 2015), which, Dr. Clare feels, may be a useful addition to what we are already using. Mark Werneke continued the classification and subgroup discussion and stated that patients with NSLBP are too complex to identify measureable subgroups to treat. He reported that subgrouping boxes patients into rigid, unidirectional approaches and doesn’t consider either the multidirectional patient characteristics or the characteristics of the clinician. He suggested that maybe randomized controlled trials aren’t the only way to determine our effectiveness with subgrouping and suggested the use of observational studies with PROMs. He said that the caveat to subgrouping is serial PROMs in order to capture improvement, or lack thereof, in a patient. The bottom line: subgrouping alone isn’t enough. We, as clinicians, have to take that next step with serial PROMs to ensure that, even if our provisional classification is correct, we have included all aspects of the multifactorial patient in order to assure a successful patient outcome. Just like Betty’s case earlier, a patient may centralize, but her improvement not be reflected in PROM if there are other psychosocial aspects, such as fear, affecting the clinical presentation. Subgrouping with serial PROMs allows us to treat the entire patient biopsychosocially. Friday concluded with a presentation by Dr. Mark Hancock on the limitations of subgrouping in which he recommended combining subgroup approaches, for example, STarT back and MDT.

Saturday opened with Grant Watson setting the stage with a discussion on the extremity joints and differentiating the extremity from the spine as the source of the lesion. Dr. Andry Vleeming presented a talk on the SIJ where he stated that, due to pain provocation and palpation tests, there is a clear way to distinguish pain from the SIJ as the origin from the lumbar spine. Dr. Heidi Prather discussed the hip joint and its overlap with the spine and pelvic girdle. She cautioned clinicians about the difficulty with searching for one “source of pain”, as this may cause the clinician to erroneously avoid the examination and treatment of another relevant area. Richard Rosedale presented the early findings from his current study that is still in the data collection phase regarding extremity pain and ruling in or out the spine as the

source of the pain. In data collection so far, 46% of extremity patients who, on intake reported no neck or back pain with their extremity pain, have been found to have the cervical or lumbar spine as the origin of their pain. Chris Chase presented a case study to differentiate the lumbar spine from the hip joint and reminded us of a few key points: spinal pain is more constant and patients with extremity pain feel better at rest; often spine pain is NAR and extremity pain has a mechanism of injury; and, spinal patients feel better with movement and extremity pain with rest and inactivity. He reminded us to always add overpressure to rule out the lumbar or cervical spine with an extremity, and if there is no change with extension, quickly check flexion and side glides. From there, Dr. Michael Heggeness presented data from both a 16-person pilot study as well as a 225-patient, double blinded, placebo-controlled study in which the intraosseous nerves underwent ablation and patients were found to improve their ODI scores post ablation. He asked us to consider the vertebral bones as a pain generator.

After lunch, Robert Medcalf kicked off the afternoon session regarding the cervical spine. Dr. Annina Schmid discussed the importance of including the small fibers in our neuro exams through the use of pinprick and temperature, and that a normal neurodynamic test does not mean the nerve is okay (Apelby & Albrecht 2013). Hans van Helvoirt presented a pilot study of three patients in which patients who peripheralized with a MDT assessment underwent an ESI (Desai et al 2013). If after ESI the patient was still a non-centralizer, then the recommendation was to focus on graded loading respecting the upper extremity symptoms. However, if the patient centralized after the ESI, then s/he was treated with MDT (Desai et al 2013). Greg Lynch followed Hans with a systematic review on the differentiation of the cervical spine from the shoulder. He cautioned us to make sure we are carefully and thoroughly ruling in or out the cervical spine in patients with shoulder pain because up to 30% of these patients with the shoulder as the primary source of pain, could have the cervical spine as the origin of their pain (Abady et al. 2017). Finally, Dr. Pierre Cote presented on Whiplash Associated Disorder (WAD) and stated that 50% of patients will still have symptoms one year later, while 50% of patients will recover in three to six months. However, he cautioned that these numbers are highly dependent on how you define recovery. He reported that the prognosis of a patient with WAD is worse with radicular signs and symptoms, increased initial neck pain intensity and increased initial disability (OPTIMa Collaboration 2016). He stated that in the treatment of WAD, MDT, HEP and advice, strengthening therex, manipulation and mobs, acupuncture and educational videos helped the patient, but the degree to which they helped them was small (OPTIMa Collaboration 2016). At the same time, massage, heat, estim and TENS were found to have no effect being equal or worse than placebo (OPTIMa Collaboration 2016).

Saturday afternoon concluded with a series of talks on MDT outside the clinic. Connie Lee presented her experience treating patients in northern Canada via telehealth and Jason Ward presented his recent Mechanical Care Everywhere (MCE) trip to Peru to bring MDT to the locals. Nicolas Turcotte presented the challenge of treating athletes on the field to screen out who needs further medical attention versus who will benefit from MDT. He noted that when working with high level athletes, they need to be pushed harder and to do more reps to be successful with MDT. Peter Schoch presented his information on the use of MDT as a screening tool to determine which patients in a healthcare system should proceed directly for a surgical consult versus patients who could undergo MDT. He found that in 10 years of screening for a provisional classification with one visit, 66% were a Derangement and 30% were OTHER. At the same time, only 4% needed to go directly for the surgical consult. William Oswald presented on the use of MDT in the emergency room (ER) in a busy New York City hospital. He reported that 45% of patients are in the ER because they can't access their primary care doctor and 30% of patients use the ER as their primary care doctor. In 15,000 visits, 37% of patients had lumbar spine pain and 20% had cervical spine pain making the ER a great place to potentially capture patients and lead them down the road towards a successful outcome rather than down the road towards an opioid addiction. As you can see, Saturday was chock full of interesting and useful information to advance the clinicians breadth of knowledge as well as offered some new perspectives to consider in the use of MDT.

The final day of the conference opened with a panel on the management of the patient. Dr. Carrie Diulus offered a treatment alternative to those patients suffering from obesity related comorbidities such as Type II Diabetes. She reported that in such patients rather than encourage willpower or a decrease in caloric intake with an increase in energy expenditure, that perhaps a whole food, plant based diet of fat and vegetables would be more successful. Dr. Matthew Smuck presented on the use of medication in musculoskeletal conditions and reported the increase in heroin use in the U.S. over the past five to seven years is due to the restriction in opioid prescriptions. He reported that opioids cause greater than 40,000 deaths per year, surpassing the number one cause of accidental deaths, motor vehicle accidents. He concluded that, "There is no good evidence for medicine for the treatment of back pain." (Bally et al. 2017). Dr. Adriaan Louw presented on words that harm and heal patients and stated that the most powerful words in medicine are "You're going to be okay." Dr. Pincus gave us tips to change patients' attitudes through providing sufficient knowledge, motivation and opportunity and that we need to ensure that we aren't giving generic reassurance and taking into account the patient's beliefs, their truth and their goals. As well, we as clinicians need to offer the patients options and discuss the pros and cons (Pincus et al. 2013). The Sunday morning session concluded with Dr. Vikas Agarwal depicting, through videos, his experiences with the use

of MDT as a primary care physician in the U.S. It was fascinating to watch patients with complaints of abdominal and chest pain, or restless leg syndrome, respond to an MDT assessment. Be sure to check out these videos on Dr. Agarwal's You Tube channel, as informing the mainstream medical community of these findings could significantly impact both patients and the healthcare system.

The final session of the conference was titled "Changing Health Care Practices". Dr. Cote returned to discuss clinical iatrogenesis in those patients with WAD and stated that TENS has no effect on patients with WAD and the focus needs to be on physical activity and performance. Dr. Louw presented on pain and the patient. He stated that no treatment will make you 100% pain free and that "Tissues heal. So, it's not that you have a tissue issue. You have a pain issue." (Louw et al. 2016). As clinicians, he encourages us to focus on function not pain when questioning the patient and as the pain decreases, function increases, so despite the pain, slowly return to function. The conference session concluded with Ezequiel Gherscovici's talk on MDT and public health. He invited clinicians to join his initiative to bring MDT to public healthcare officials. To get involved, email your local branch and tell them you want to get involved with the public health committee.

There was certainly a wealth of knowledge gained at this year's conference, and as always, the conference concluded with the presentation of the Extension Award. The winners were:

2016: Ron Schenk, PT, PhD, OCS, FAAOMPT, Dip. MDT

2017: Hans van Helvoirt, MA, PT, Dip.MDT/MT

Thank you to both the conference organizers and presenters who have challenged us to think, grow and work towards becoming better MDT clinicians through this venue! Hope to see you next time!

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