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Single-Session Treatment of Hip Pain: Factors Underlying the Healing Process[1,2]

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After experiencing your guided exercises on the gym floor, I slept comfortably and without any pain for the first time in four years. This morning when I went grocery shopping, I could walk straight with a normal stride and again without pain. I feel great. --Paul Maassen

The rapid successful resolution of pain described above occurred as the result of a spontaneous teaching moment with a person in the gym. This success is not just a case of magical/spontaneous healing but of the integration of multiple factors that promote healing and underlie somatic awareness practices and successful biofeedback training. In this clinical note, we describe 1) how the educational treatment began, 2) the educational/clinical coaching sequence, and 3) factors that therapists may want to consider in their treatment.

How the Educational Treatment Began

The authors were jogging easily and smoothly on the treadmill in a fitness room and their movements appeared relaxed and effortless despite their ages (49 and 65 years). After running on the treadmill for twenty minutes, they sat on the wooden floor and practiced a few simple Mobilizing Awareness® exercises (Mes, 2009). While performing movement exercises to loosen the hips, pelvis, and lumbar regions of the body, the two therapists were exchanging self-observations and discussing how these practices affected their bodies. Then, a 59-year-old compact looking man wearing bicyclist clothing, who initially had been working out on a stationary bicycle, came over and wondered if he could also do these practices to regain some of his hip flexibility. He was very doubtful because he continuously has burning pain down his thigh and reduced hip flexion following an arthroscopic hip joint surgery (joint cleansing). As he spoke, he demonstrated his movement limitations. He talked about his frustrations with his inability to regain his fitness, as the chronic burning pain down his leg interfered with his sports and movements. He also observed that his walking pattern had become irregular and off balance. His sleep was affected and he felt that his ability to enjoy nature and to feel alive

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was significantly reduced. He felt totally frustrated with his therapists and their treatments, although, he faithfully followed their prescribed strengthening, stretching, and aerobic exercises. In the last four years he had not improved and after exercising he felt stiffer and experienced more pain. He had finally decided to start a new investigatory trajectory for his hip problems. He was on the waiting list for an MRI and eventually expected to have hip or knee surgery.

The Educational/Clinical Coaching Sequence

The therapists listened with attention to his story. On the spur of the moment (and without any attachment to a possible outcome), they taught him the following two simple somatic pelvic/hip exercises of the "Cat Stretch Series" from the Mobilizing Awareness® method (Mes, 2009; Hanna, 2004; Feldenkrais, 1991): (1) the muscles of the waist movement pattern and (2) the psoas movement combined with the neck rotation. The teaching process was dynamic and the therapists began to teach him the first exercise as he was telling his story. He layed down on the floor to do the practices and one of the therapists felt the muscles of his waist and leg and provided ongoing tactile feedback on what he was doing. He was asked to place his own hand on his muscles to feel his muscles tightening and relaxing.

The major components of the practice included:

- Promoting learning through imitation (mirror neuron learning) by instructing him to observe the therapists doing their movement exercises (Billard & Arbib, 2002).
- Providing detailed explanation of what was expected while he was performing the exercise.
- Giving ongoing verbal and tactile feedback to guide him through the movements.
- Teaching him to feel/sense his own muscle contractions and relaxation by feeling his own muscles with his hands and sensing the sensations inside, while reminding him to slow down the movements so he could feel and sense.
- Helping him learn to differentiate isolated movements from whole-body movement patterns and develop a sense of being able to feel each part of his body move separately.
- Teaching him to take time to relax completely before he started the next movement sequence (this principle is based on research using SEMG biofeedback and described in Peper et al., 2008). Like most people, he thought he was relaxed even though his muscles remained slightly contracted.
- Incorporating diaphragmatic breathing in phase with the movement patterns--inhaling during trunk extension and exhaling during trunk flexion.
- Describing how he could do these practices at home.

The therapists shared the possibility that *use develops structure and structure limits use*. They suggested that he might be misusing himself while doing his strengthening, stretching, and fitness exercises . He probably compensated with bracing and had a sensory-motor amnesia as a result form his surgery. From this perspective, if he could use himself differently, he may be able to improve his movement patterns and reduce his pain.

The teaching/coaching focused on how to attend to the sensations with passive attention instead of how quickly, how much strength, and/or distance could be attained. Somatic learning focuses on feeling the sensations internally without judgment. This is often the opposite of how therapists teach people to practice their physical movements as distractions are common in the world of fitness and rehabilitation. Students/clients/patients tend to go on the treadmill and focus on speed or distance, the television program or their iPod music. They

disconnect from their bodies. In contrast, Mobilizing Awareness® movement focuses on enhancing awareness as is illustrated in the experiential practice, *Loosen the Neck*, in which increased rotation usually occurs without effort or striving.

Experiential Mobilizing Awareness® Movement Practice: *Loosen the Neck.*

Sit, for this exercise, on the edge of a chair with your hands on your lap and your feet beneath the knees. Rotate your head to the right and look at a spot on the wall as far to the right as you can. Remember that spot. Rotate back and look straight ahead.
Bring your left hand to the left side of your neck with your elbow pointing forward. Gently rotate the elbow to the left as you rotate your head to the right; then rotate your elbow to the right as you rotate your head to the left. Keep alternating moving your elbow in the opposite direction of your head. Repeat ten times.
Stop and drop your left hand on your lap and rest and relax for about fifteen seconds while breathing into the abdomen.
Now bring your left hand to your left ear while your elbow points straight ahead. Move your elbow forward and backwards so that the shoulder and shoulder blade move forward and back and allow the hand to slide forward and back over the ear. Repeat about ten times. Then stop and drop your left hand onto your lap and relax for about fifteen seconds.
Now rotate your head to the right and look at a spot on the wall as far to the right as you can and then come back to center.

Figure 1. Initial rotation to the right is followed by elbow and head movements in opposite directions which is repeated 10 times (photos by Jana Asenbrennerova)

Figure 2. Elbow moving back and forth which is repeated ten times and followed with the final head rotation to the right (photos by Jana Asenbrennerova)

Observations: Most people experience that after this exercise they can rotate easier and look much further to the right than at the beginning. This mobilizing movement exercise illustrates that significant change and flexibility can occur without forcing and striving (adapted from an exercise taught by Servaas Mes, 2008).

The specific movement practices were only a small component of the actual teaching process. Underlying the teaching were strategies that provided an atmosphere of safety, hope, and acceptance. The therapist/teachers were totally present with and accepting of the participant.

The teaching process continuously focused on improving what is possible, being open to change, and the possibility that health could improve. The components of the teaching process include:

- Being totally present with the participant.
- Imposing no time limit on the session—in this case, the session took over an hour.
- Promoting the development of hope through the actual felt experience of movement and experienced increase in flexibility.
- Building from simple movements to a more complex integration of movements without evoking a striving or startle response.
- Guiding the participant to be present within his soma (body experience) while doing the movements with the appropriate mental, emotional, and attentional attitudes that will help him relearn to trust his body.
- Slowing down movements so that co-contractions/bracing can be felt and experienced and the felt subjective experiences shared with the therapist(s).
- Relaxing after every contraction and extension, reducing co-contractions and dysponesis, and integrating the developmental movement reflex patterns--aiming to disengage previous patterns of movement disturbances.
- Providing an openness for the client to talk about his previous experiences (frustrations about how his pain limited and constricted his general daily activities as well as an openness and desire to learn).
- Reframing the client's symptoms from a structural perspective to a functional perspective. He was contemplating potential hip surgery (a structural perspective) to showing him that hip function could be improved by somatic awareness practices (a functional perspective). The function of the hip was limited, and these limitations decreased when he was practicing the somatic exercises.
- Making the learning process fun for the therapist and participant. In this case, it involved a spontaneous progression that developed sequentially as skills were acquired.
- Holding an implicit belief that improvement is possible: "*There is always room for improvement.*"

Results

After the session in the gym and without prompting, Mr. Maassen spontaneously said that his ongoing burning pain--a pain he had felt every day for the previous four years--was totally gone. The therapists then checked his hip flexibility and found that it had increased by 20 degrees; in addition, his leg movements appeared more fluid. They discussed with him the concept that if his pain could disappear, his problem was most likely not only a structural process. It was probably mostly a functional problem of how he used his body and how he himself, albeit unknowingly, restricted his movement. We suggested that it was *he* who had done the exercises and that he could continue to do them at home. He requested an appropriate referral for continuing treatment/education. He emailed a few days later and said: *I am very happy that I met the two of you!!! Because of you, I have re-thought whether I need an operation. I would rather not have the operation. I have shared my experience of the exercises with my personal physician. She was very impressed. I told her that I will continue with the exercises. Again thank you very much from me and also my wife*.--Paul Maassen
The success he described was enduring. Two and a half weeks later, he realized that he needed to listen to his body's limits--when he did, he was pain free. By listening and respecting his body limits, he slowly extended these limits and continued to improve his physical functioning.

At a six month follow-up he continues to be pain free. And more important, by continuing practicing the exercises, he continues to improve in strength and flexibility. He also observed that after he stopped these exercises for a short time, he experienced more stiffness, which disappears when he restarted the exercises again. He reported that he now has a lot more fun with his family, friends and while doing his sports. He and his wife have become closer because his pain no longer is the number one topic in their conversations. With no more pain, he has found new friends to bike with and has begun interviewing for a new, more satisfying job—once again he experiences his life as having options.

Factors That Therapists May Want to Consider in Their Treatment

It is hubris to claim that we know exactly why Mr. Maassen got better. It could have been the somatic exercises or it could have been a matter of timing/synchronicity. Nevertheless, there are common themes that appear to underlie successful recovery. Ironically, some of these are well-known components such as tender loving care which is often forgotten or eliminated in the drive for efficiency and cost containment. It is no wonder that patients consult more and more alternative practitioners for treatment and report significant benefits (Barnes, Bloom, & Nahin, 2008). Clinical success may be enhanced when some of the following approaches are incorporated into the treatment/teaching process:

- Teach correct use of the body; since, many symptoms are the result of incorrect use. Patients are unaware of what is going on and experience learned disuse, dysponesis, muscle substitution, and sensory motor amnesia (Cram, 2003; Hanna, 2004; Whatmore & Kohli, 1974, Mensendieck 1954).
- Provide the experience of hope and success in the first session. So often the initial session makes the person feel worse, as the focus is on taking the history and insurance information. Remember that in the process of telling their personal histories, patients often re-experience negative feelings and therefore feel worse. Orchestrate the first session so that the patient actually feels and senses a positive change that creates the non-verbal experience of hope.
- Create a learning environment that maintains the focus of the client in present time within his or her own body.
- Focus initially on the attentional and emotional processes of how the movements are done and less on strength and range of motion exercises.
- Teach small achievable steps. Training movements with ongoing verbal and tactile feedback so that the patient understands and feels—this takes time. The patient (who should really be called a student) needs to learn to sense and perform the intended movements in small steps (Balm 2000).
- Do movement safely and very slowly with attention/awareness, openness, and without judgment instead of using will power to force or with mechanical repetition.
- Teach patients to let go of their patterns of tightness that were created in the past and allow them to trust their bodies in present time. The therapist needs to provide an atmosphere of safety so that the patient can learn. Patients need to be touched and nurtured to help them mobilize their own healing processes.
- Relax muscles completely after each contraction—most people and therapists are not able to sense whether a muscle is relaxed or slightly tensed, or whether other muscles or other biological systems have been activated (Booiman & Peper, 2008).
- Be open and work with the patients' emotional factors, mental images, and/or attentional style that are part of the healing and learning process. Touch with a caring attitude directs patients' attention and reframes their subjective experience of how to sense a particular part of their body (e.g., *that* leg shifts to *my* leg).

- Listen to the patient and respect him or her as a person; many patients unfortunately experience that they are treated as machines or numbers. Tender loving care (TLC) is one of the major reasons that patients seek alternative and complementary medicine/holistic health approaches.
- Allow sufficient time to teach skills until they are mastered. It is almost impossible to teach a skill to a person in a 30-45 minute session. Remember how long it took a child to achieve mastery of wave boarding, swimming or biking. Our simple session took more than an hour, with two therapists—what he learned in this hour was life changing and shifted his perspective.
- Use protocols as background themes that are dynamically adapted and changed for every person moment to moment. The therapist should elicit ongoing feedback of the learning process. In many cases, therapists and patients are unaware of subtle or gross processes that are very important and beyond the "technical scope" of the treatment or exercise.
- Become more aware of the difference between healthy movement patterns and movement patterns that create pathology. Therapists and patients need to remember that the hip bone is connected to the thigh bone; the thigh bone is connected . . . in other words, local movements are part of whole-body movement patterns.

In private practice it is not always possible to work and teach as spontaneously as was possible in this treatment session. Yet, this case describes some of the factors that created clinical success and can be integrated into normal treatment sessions. An important concept is changing the treatment perspective from therapy to education.. If the therapist can see the patient as a student and the patient can see the therapist as the teacher, then, if the student is not mastering the skill, it means that the teacher is not teaching correctly. In addition, if a patient perceives the therapist as a consultant, then the patient can hire and fire the therapist instead of being dependent upon him or her. While working with clients, the client is *a person with a disorder, not a disorder with a person attached to it.*

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