

## *It's Not Magic, It's Science*

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**T**his is the title I have given to my two hour talks about MNRI®. I arrived at this title because so often people tell me, "If I was not watching with my own eyes, I would not believe that change could happen so quickly. It looks like magic." We need to be careful when we are in the realm of new scientific information, especially information that may not be new, but is new to us. Our first inclination may be to dismiss it. Because some aspects of this work can bring change about quickly, people may not believe it is possible or believe it is real. Doctors sometimes use the word miracle in place of magic. Regardless, of the word used, we often dismiss a scientific concept that contradicts our previous understanding of the body and, in the case of MNRI®, the nervous system in particular.

I have chosen to tell the stories of three clients that left their doctors scratching their heads and dismissing the results as a 'miracle' because the rate of change was very quick (with respect to the condition). But even though the doctors describe these instances as miracles, they continue to refer patients to me with comments like, "I'm not sure exactly what this specialist does, but she gets results no one else gets." My hope is that one day, they will attend one of my *It's not Magic, It's Science* talks. Then, hopefully, they will come to a shared understanding of how the nervous system works.

I will limit myself to three case studies, although in the years since adding MNRI® and other modalities to my private practice I think I have accumulated enough stories for a separate book of testimonials. I am choosing these three stories because, in two of the three cases, Dr. Masgutova never saw the clients described. In one of the cases, she saw the client for a total of three hours. I am emphasizing this, not so you will conclude that I am an extraordinary therapist, but because I believe the strength of a method can only be evaluated if students can replicate the results of the originator of the program.

### ***A Story that is Very Hard to Swallow***

A client came to me very early in my MNRI® training in an unusual manner. He was referred to me by my daughter's 12 year old friend. This man was her grandfather, a seventy-two year old gentleman, who had six months previously suffered a brainstem stroke.

He had experienced a rather good recovery considering the severity of the stroke. Six months post stroke, he was walking with canes, dragging his left leg slightly. Apart from the dropped foot, there was no visible paralysis, although he still struggled with some fine-motor issues. His speech was clear. He was happy with his recovery except that he still could not swallow.

He could swallow nothing, not even his saliva. His epiglottis appeared to be paralyzed. He had no feeling



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on the back of his tongue. He said the experience was like dental freezing that never wore off. As a result, he was fed by g-tube. According to him, the most severe consequence of his not being able to swallow was he had to sleep facing down so his saliva could run out of his mouth at night. This caused him incredible pain in his back. Instead he had chosen to sleep on his side, but this required him to wake up and spit every five minutes. He said he felt the lack of deep sleep was making him psychotic.

His doctors told him he might never regain his swallow. They referred him to SLP's who told him that if he visualized swallowing, perhaps one day he would remember how, despite the lack of sensation in his mouth. But they had little else to offer him, except to help him psychologically prepare for the fact that he may never swallow again. He traveled a very, long distance to see me because he was desperate. I decided to try MNRI® Oral-Facial Reflex repatterning. At the time, I had been fortunate enough to watch some of the best MNRI® Oral-Facial specialists do this although I had not done it myself. I had seen them bring about phenomenal results in minutes so I knew this was possible and wished desperately that one of them were here to guide me.

But I could see the desperation in this man's face. I began by doing every technique I could think of to his head and face to wake up and organize the facial nerves. Then I used several techniques in his oral cavity. I was very careful to avoid him accidentally aspirating saliva into his lungs. It was a real concern. Finally, I did the techniques along the throat for swallowing that I saw more experienced MNRI® specialists do and, in less than a minute, this man began to swallow. He was ecstatic, "How could this have happened so quickly?"

He reported he could now feel the entire inside of his mouth and he wanted to eat food immediately. I made him promise not to do so, explaining that although the epiglottis was definitely moving, we did not know if the movement was sufficient to prevent him aspirating food into his lungs. I showed his wife what to do to stimulate the swallow and showed him how to systematically stimulate the inside of his mouth to ensure that complete feeling would return. They practiced on their long journey home.

During the trip home he became a bit angry at how the doctors had been complacent, leaving him in such an awful place, when the solution had appeared relatively simple to him. He was tested the following day and the doctor was amazed that the results indicated that he could safely swallow and eat. I saw this gentleman only one more time to help him with his foot drag and that, too, was resolved with a single intense session of Leg Cross Flexion-Extension Reflex repatterning and hooking up all the pieces of his gait. His neurologist still sends clients several hundreds of miles to see me, as Neuro-Developmental Therapist, when he has a 'tricky' case.

This experience taught me to trust MNRI® results and to strive for deeper comprehension of the neuro-sensorimotor modality as a new piece missing in other methods. Even in the hands of someone who has not mastered all the techniques, a client will experience change, because the nervous system is waiting for the information provided by this modality. This was certainly true in this grandfather's case. His body was waiting for the sensory-motor stimulus that would evoke the expected complex proprioceptive-motor response of a swallow. After all, swallow as a genetically originated sensory-motor response, was a motor pattern that he had been practicing months before he was even born, as well as all his life before the stroke. All he needed was for that pattern to be reawakened.

### ***It is Good to Crawl Before We Walk: A Story of the Extraordinary***

Many children in my practice have cerebral palsy (CP) as the result of birth trauma. This is a story of 'Sam,' a little boy who was brought to me at 18 months of age. The parents had recently received confirmation that he had CP. They were told that their child would probably never walk and they needed to begin preparing for this eventuality. Sam's spasticity, affected both sides of his body to different degrees, in both upper and lower limbs. His legs already showed mild deformity due to it. He had health complications, exacerbated by a serious GERD condition, that prevented him from gaining weight. To his advantage, he did not have seizures.

I am lucky to collaborate with a wonderful group of professionals, who cross-refer. I must point out that I have not been the only one offering this little one therapeutic support and I was not only using MNRI® with him. He received regular cranial sacral therapy treatments from me and two other practitioners. He also received regular chiropractic support from me and a naturopath. And his mother used other programs.

In CP, it is extremely important to use whatever we know to help the development of the symmetry of the skull, increase its capacity, and create space for the brain to grow physically and to develop. There are many

reasons for constricted sutures that go beyond the scope of this story, but creating more possibility for brain development is always one of my priorities and one to which MNRI® pays particular attention.

I usually begin with MNRI® Neurostructural Reflex integration therapy to integrate protection and survival mechanisms but in this case, I used it first and foremost to boost Sam's immunity and support necessary muscle bulk and weight gain. I did several sternum techniques to address his GERD. Core Tendon Guard helped to stabilize his system and he began to gain weight and build muscle. Over the next 24 months, he had periods of illnesses when he would lose weight; however, he has now gained both weight and muscle mass and has gone extended periods (weeks on end) without reflux or vomiting.

Sam's family was very motivated to work and did all the exercises I offered very regularly. They made all the necessary dietary changes and were faithful with supplements. Initially, I visited him very often at night, usually once per week. He did not like being touched and would cry if I touched him while awake. As with other children, this quickly faded, he began to enjoy touch and I was able to work on him awake or asleep.

I began with repatterning the spinal reflexes. The family did feet and hand reflexes and Embracing Squeeze daily at the beginning. We quickly moved to repatterning crawling. At 22 months, 4 months after the doctors said he probably would never walk, Sam was walking without support. By 24 months he was walking in bare feet and able to adjust easily when stepping from the sidewalk to grass without falling. By 28 months, he was running.



Automatic Gait shown in an infant.

What sets this therapy apart from others, is how we teach children with CP to walk. I recommend that parents only use orthotics if it means the difference between walking or not walking. Sam never used orthotics in the process of learning to walk, much to his physiotherapist's dismay. Immobilization caused by orthotics prevents the information from reaching the limb and inhibits the reflex pattern.

Refusing orthotics or minimizing them to 2-3 hours a day takes great courage on the part of the parent, but it always seems to pay off. If we inhibit, for example, Crawling or Automatic Gait Reflex, the nervous system is unable to learn from feedback. As result, the reflex cannot mature and the nervous system cannot create pathways that would lead to further development. In this particular case, the little boy's gait and foot alignment changed monthly. Any customized orthotic would have been outdated by the time it was manufactured, not to mention the expense of changing the orthotic monthly to reflect the current relationship between the foot and leg.

Body righting and postural control was challenging. We would get it turned on for a day, sometimes a week, and then his posture would collapse again. Sometime after 27 months, when (following a session with Dr. Masgutova) we started activating sensory-motor points for Trunk Extension, Sam became able to maintain whole body extension. His Trunk Extension continued to improve with work on these points and I was grateful to have learned more techniques.

Neurological conditions manifest differently in each child. With Sam, the key appears different from month to month. One month, joint rotations are the key. The following month, proprioceptive compressions, vibration or neurosensorimotor points activation may be the way to unlock the system. Although this complicates the task for the specialist and the Home Program for the parents, it is crucial to work with dynamic changes in reflex patterns as they occur.

Just previous to our first visit, the doctors told Sam's parents he would never walk. A simple assessment of his reflexes told me immediately that he still had a chance. Although his development has out stripped any possibilities that his doctors saw for him, understandably his parents want even more for him and hope that some day his gait will show no trace of CP.

At age three, there is no visible evidence of spasticity left in Sam's limbs though his joints in one wrist, knee, and ankle can be very stiff. His one foot still rotates internally and on some days it is worse than others. However, he can and does march well, drawing his knees up with great trunk extension.

He often forgets and points with his middle finger rather than his pointer. He holds a pencil with a fully developed pincer grasp and developmentally his fine motor skills are on par. His head size and shape is within normal range, but we will continue to pay attention to the sutures as he grows. He still has periods of digestive upset and needs more oral work to improve his tolerance of different food textures and to help his chew

become more circular.

In the meantime, this family has to struggle with the side effects of their child having received MNRI® for two years. Sam is fluent in two languages and has perfect articulation. He is an absolutely brilliant child who understands complex mathematical concepts well beyond his years. It is difficult to see how he will be satisfied in a typical school setting. This is consistent with my experience using MNRI® with CP. The child's cortex develops at an increased rate leaving parents with a brilliant child. We experience this when we begin using MNRI® in infancy with any child, but it appears particularly pronounced in many children with CP.

### *A Fall into a Journey of Endless Discovery*

Just over two years ago I received a distress call from a mother whose son was in the spinal cord unit at our local hospital. Ryan was 23 years old and had fallen eight stories out of a downtown high-rise. (This was not an attempted suicide.) She had heard about my work with spinal cord injuries and was hoping I could help her son. I entered the hospital under the guise of alternative pain management but the family hoped that I would be able to offer more.

This young man's injuries were substantial and complex. He managed to right himself while falling, allowing him to land on his feet. Unfortunately he landed on concrete. Ryan seriously damaged his left foot and ankle joint. He drove his tibia through the femur on the right leg. He had a complete equine caudal sever and his spine became detached from his pelvis. He also fractured the scaphoid and some of the smaller bones in his right wrist.

My first question on the phone to Ryan's mother was, "Did he hit his head on the way down or upon landing?" The answer was no. I wanted to work with this young man immediately. His brainstem was not injured. Even though he was 4 weeks and 9 surgeries post accident, we were still in a window of tremendous possibilities.

Pain management was a struggle for Ryan and was the priority of every visit for the first two months. Fortunately MNRI® and other modalities were very efficient at organizing the nervous system. Using these methods, I was usually able to relieve his pain within 20 minutes (unless it was a day immediately following a surgery, then it would take up to an hour). He went on to have 6 more operations in these next two years. He was very proud that he was fully free of pain medication at 7 months post accident and 2 months after his last major surgery.

During this first visit, after his pain was under control, I asked Ryan if there was anything else he hoped I could do for him. He asked if I thought he would ever walk. He did not beat around the bush about what his main concern was. In MNRI® we are trained to always work with the client's primary motivation because this is where we find strength in the system. I knew at this point the doctors had not directly given him a definitive prognosis, but it was written in his charts and the nurses had spoken to his mother about preparing him for his life in a wheelchair. His left foot was in an air cast with an entire piece missing from his heel. He was in an isolated unit for MRSA (flesh-eating disease). They were delaying fusing his ankle due to the MRSA and trying to stabilize his pain management. Understandably, the staff were managing his condition on a day-to-day priority basis and were not dwelling on what the prognosis one year out was going to be.

Ryan was well over six feet tall and largely immobile, but I did my best to test his reflexes. All his reflexes were active and within the range of functional. It was clear he was very athletic before the accident. This was a very encouraging base with which to work. I said that I did not know what his 'walking' would look like, but it was clear from how his reflexes were performing, there was a great deal of possibility. I believed he would be able to walk in some fashion, even if they ultimately amputated his left foot.

Initially, I visited him 3 times per week for two months with breaks for surgeries and my working out of town. I structured each session around showing him that he could now do something that he was unable to do at the beginning of the visit that day. This meant at every visit he and his mother could see some change. This was extremely important because they were swimming in a sea of pessimism. He was in a hospital ward where there was only one outcome for these patients.

Either he was very unlucky, or the hospital perceived his condition in a very grim light, because he was assigned a physiotherapist who usually cancelled on him or did not attempt to do more than stretch his limbs. I can only think she was unsure about how to work around his pain, for she did almost nothing with him for two months. When he gained more mobility, she spent 30 minutes once a week with him for the next 2 months.

After two months of working with Ryan, the doctor gave permission for him to put some weight on his right foot. But his physiotherapist refused to allow this during therapy. She would say that they would eventually work with him at the rehabilitation hospital where he was going next.

This thinking is entirely opposite to MNRI®. We want to work as close to immediately after the accident as is reasonable. This gives us the biggest window of possibilities. The very first day, I showed his mother reflex exercises for the feet. He could not feel his feet (except for neuropathy). Even though the left foot was in and out of casts, she did what she could. If the toes were exposed, she rotated them. With permission, I was able to remove the air cast and do embracing squeeze on the foot and so was she. She gave her son tireless attention doing any exercise I asked of her for the first five months she was there.

Initially, I did MNRI® Neurostructural Reflex integration therapy only on the front of his body – Ryan could not turn over as they had just reattached his spine to his pelvis. Within a week, he was able to turn on his side and I was able to do Spinal Galant. At two weeks, we were able to get him prone for a few minutes and I did Spinal Perez. When I could not get him into ideal positions, I would put my MNRI® knowledge together with my chiropractic knowledge and do the best I could by reaching underneath him. Therapy was very imperfect at first.

Although the family was encouraged by the small changes they saw each day, we turned a corner at three weeks when Ryan was able to control his own urination. At four weeks he was able to manage digital stimulated bowel movements on his own. I now had his attention. At five weeks, the first signs of sexual function returned. You can imagine how these gains in function impacted his psyche. The notes in his file indicated that the medical staff assumed that bowel, bladder, and sexual function would never return. It took a bit of convincing the doctor to leave the catheter out permanently. Understandably, they were concerned that without feeling, he would not evacuate entirely. Eventually he demonstrated through tests, that although he had next to no sensation, he could fully void.

Four months post accident, the flesh in his extremely damaged foot was responding to a skin graft and the doctors wanted to go ahead and fuse his ankle. I asked the family to delay this surgery knowing that if the foot was fused this would limit what function we could return to the foot. Understandably, the family felt tremendous pressure from the doctors to proceed with conventional treatment. The medical staff still had no hopes that he would ever walk. The goal of the surgery was that he would be able to place enough weight on the foot to aid his balance in transferring in and out of the wheel chair. My biggest challenge was working with a vision of Ryan's recovery that differed so greatly from that of his medical team.

After this surgery, he was sent to our local rehabilitation hospital where he would receive more therapy. At this point, I began seeing him only two times each week as the rest of my work schedule had increased for the summer months. Again there were weeks I did not see him at all due to my working in MNRI® clinics.

At the rehab hospital, I was not invited to work with Ryan in the rehab room so I had to work with him entirely in his hospital bed. At this point, I began working Trunk Extension and Leg Cross Flexion-Extension in earnest. At six months post accident, he stood up on both his feet. Even though he could not feel his feet, he could put weight on them if he held onto something. I remember being so surprised at how tall he was. The doctors came by weekly to see this feat. They were amazed, but did not want to hear about the special therapy he was receiving. They decided he was a miracle...one of the lucky ones. They decided this because they knew that the rehabilitation he had received through the hospital could not account for his current level of functioning.

When he could stand, the rehab hospital wanted to give him a walker. This time I was more forceful with the family. I explained that although the walker would give him increased mobility sooner, it would take him out of Trunk Extension. I believed it was much more beneficial to delay this 'false mobility' where he would be forced to drag his feet because he could not feel them, in trade for 'real walking.' Thankfully, this time they did agree to try to follow this philosophy. Three weeks later, he walked with assisted crutches while maintaining Trunk Extension.

With the assisted crutches he relearned homolateral walking and Automatic Gait again. Feeling began to awaken in his left glute and some sensation returned



Trunk Extension shown in an infant.

to his right foot for the first time. And more importantly, Trunk Extension had become integrated and now was a resource we could build upon to recover matured gait.

A week before he was discharged, a doctor interrupted our therapy session and demanded that I explain 'scientifically' how it was possible that this patient could stand when his most recent x-ray still showed a complete sever of his pelvic nerves. I explained how reflexes educate and build the peripheral nervous system and that the plasticity was extremely dramatic in this case. Furthermore, I intended to use this strategy to teach Ryan to walk. Days later I heard this doctor repeating this same explanation to a group of doctors who came into the room to see the 'miracle' for themselves. I smiled silently to myself; maybe there is hope.

Seven months post accident, Ryan was discharged from the rehabilitation hospital. He was supposed to return two days each week for ongoing physiotherapy. However, this was not possible due to the waiting list. He could not continue his therapy for another three months. In the meantime, all he had for support was me and a few 30 minute visits to an ad hoc physiotherapist who did not have any specialized training around spinal cord injury. Ryan could stand and balance briefly, but he was wheelchair dependent. He had very little stamina and his muscles fatigued quickly when using the assisted crutches.

We worked together twice a week. (At this point, his mother returned home 1,000 miles away ending her seven-month extended stay working with her son.) In these two months he went from walking short distances with assisted crutches, to getting around entirely on his feet using ski poles for support. Understandably, because he was a young man, he preferred to use canes as they drew less attention than ski poles. Again, I asked him to be patient and use the ski poles. With the poles, he was able to maintain Trunk Extension while he walked. Leg Cross Flexion-Extension was not adequate on the left leg due to the injured foot and I was afraid he would wear down his hip unnecessarily if he persisted with the canes. At one year post accident, Ryan was solidly using walking for getting around with only the poles for support. Enough dorsi flexion and sensation had returned to his right foot that enabled him to start driving again. He was glad he took my advice and did not retrofit his car with hand controls.

Throughout this rehabilitative process Ryan was very confused by how greatly the MNRI® approach conflicted with the approach of traditional physiotherapy. He was a male athlete who thought in terms of muscles. He understood when therapists emphasized core strength. All their exercises were to support his core or to strengthen his legs using a classic weight training approach. It was true; he was very weak. In contrast, I explained that building muscle in isolation to other muscles without understanding how the muscles communicate with one another was not efficient and did not ultimately guarantee increased function.

For example, at one point, he could not fully extend his right leg. The physiotherapists said if he spent 3 weeks strengthening his quads, he would be able to straighten his leg. I worked with him and he straightened his leg in a single session. This was not a problem of strength. It was a problem of communication. My approach was to track the information as it traveled to the hamstring and to see where it was blocked. There was, after all still a complete sever of the equine caudal nerves. His body needed to create and learn an efficient pathway from his lumbar nerves to deliver the information to his tendons and ligaments of his legs. We used reflex repatterning and other modalities to build up the peripheral nerve net to carry this information more efficiently.

Ryan has had several victories and many setbacks along the way. Two years and two months and 15 surgeries post accident, he walks unassisted. No supports! He has an orthotic on his fused foot that supports him up the back of his calf. On his right foot he has an elastic band that attaches to his shoe that gives him additional support. He has about 60% feeling in his right foot and about 30% feeling in his left foot. He can stand for a minute in his bare feet, unsupported on a balance board. It is not surprising that his goal is no longer to walk, but to run.

His only regret was allowing them to fuse his left foot. He understands now, that they did so thinking he would never walk so they did not take the care that was necessary to ensure that full function would return to the foot. They did not try to reattach ligaments, etc.

Today, feeling has not fully returned to Ryan's lower extremities, but every day it continues to change. This again goes against what has been drilled into him. Every professional in the rehabilitative process has told him that possibilities of improved function end at two years post accident. He is now two years and two months post accident and he has not completed the trajectory of his full recovery. For the last year, on average I have

seen him two times per month; yet, he continues to make considerable gains.

Ryan takes great pleasure when people who do not know his story ask him, "What happened? Did you sprain your ankle?" For this is how he presents. With orthotics, he walks with a slight limp. But neither he nor I believe his journey is at an end. Every day more function develops. He is now getting the first sign of dorsi flexion in his fused foot. School never came easily for Ryan. He is now attending university and admits that learning is much easier than it used to be – an inadvertent side effect of MNRI® therapy. The numerous videos done by us show all the truth of restoration of mobility and coordination of the gait and other motor functions.

I have learned a lot with Ryan. MNRI® and other techniques that educate the nervous system will continue to recover function if one is patient and perseveres. It is hard for families not to listen to the experience of traditional medicine when it places limits on our expectations. And it is understandable for traditional medicine to place these limits, when they have one particular understanding of the nervous system. However, I believe we have produced enough consistent results, that it is time to stop dismissing these results as miracles.

It may look like magic, but it is science. It is clear, this is science we have yet to fully understand and appreciate. But it is science that has the potential to quickly and dramatically transform peoples' lives.



*I am not fortunate to work with any other MNRI® therapists in my area. Every day I wish there were colleagues to bounce ideas off. But I am so grateful for the parents of my clients. They work so faithfully with their children and have given me so much of their trust. In the absence of colleagues, they are my inspiration each day that I go to work. I thank them for allowing me to share their stories of incredible courage, perseverance, and hope. – Dawn Burnell-Powers*