



## **Discovering the NDT Difference**

A Nurse Gains First-hand Therapy Experience

By Paul A Nathenson, RN, CRRN, MPA

I have been a registered nurse for 25 years and a certified rehabilitation registered nurse (CRRN) for the last 15 years. As a nurse I always figured that anything a therapist could do, nurses could also do. True, maybe we didn't work on gait training, but we ambulated patients. We worked with patients with dysphasia by measuring thickeners and monitoring respiratory status. As far as ADLs go, I thought that nursing was the real deal.

In December of 2003, I had a massive seizure and cardiovascular accident caused by a brain tumor. I had a craniotomy the following February and was subsequently admitted to Madonna Rehabilitation Hospital.

After my surgery, I was shocked to realize what it really meant to be hemiplegic. All I had worried about was the weakness I would have in my left arm and left leg. In my case, I had an almost total loss of function of my left arm, since that is where my tumor was embedded on my motor strip. But the most shocking news of all was not my arm or leg function, it was the extreme weakness in my trunk.

What I began to realize, with the help of my NDT-certified therapists, was that core strength was essential to my ultimate success. One of the things I liked about my NDT-trained therapists was that they had a philosophy or framework for treatment. This made the objectives of my treatment easier for me to understand, which helped to keep me motivated.

My NDT physical therapist explained that it was essential to build core strength before moving on to higher-level skills. I think she was trying to help me become more patient about my progress.

It was the NDT framework that aided me the most in terms of pacing myself through rehabilitation. The science behind the framework gave me a greater sense of trust in my therapist. We worked on core strength and began to work on balance and ambulation. As we did this, the therapist had a very hands-on approach, facilitating some muscles through touch, pushing, and tactile input, and inhibiting others through the same tactile techniques.

I found that I could get muscles to respond with tactile or proprioceptive feedback that would not respond in the absence of feedback. The problem in a neurological insult is that you know what you want the muscle to do, but you just can't find the route to get the message to the muscle. This is so psychologically frustrating that it is easy to give up and say you can't do it.

My therapist wouldn't let me do that. In addition to receiving the hands-on approach of NDT, I practiced walking on the weight-assisted treadmill. My foot would swing out to the left because I had so much trouble bending my knee.

The therapist guided my foot through a more normal gait pattern, explaining that this would help retrain my brain to reestablish more normal motor planning.

When I was discharged from inpatient rehab, I entered a day rehab program. This was a new program with inexperienced therapists who had no NDT training. Until I entered this program, I didn't really appreciate what the NDT-trained therapists had done for me.

In the day program we worked on strength and speed. Unfortunately, I actually began to lose function and to develop pain in my shoulder. I could go faster, but I was all over the road. Limping, with arms swinging, I was getting around, but not the way I ultimately wanted to.

I am not back to full function, but now, six months after surgery, I am in outpatient therapy with an NDT-trained therapist. I have learned the next NDT lesson: motor planning. The NDT strategy is to facilitate coordination of movement and posture so that muscle groups can begin to work together. I no longer have pain in my shoulder and no longer use a cane, although I still use an orthotic.

This has been a learning experience for me. If I were to make a change in how we deliver rehabilitation care, it would be to match patients with specially trained and certified therapists. I learned that it's important to keep the same therapists from inpatient to outpatient, and to bring patients back into rehabilitation at prescribed intervals in order to review exercise programs, goals, and strategies.

I am optimistic about the future and about my abilities. I am particularly appreciative of the expertise of the specially NDT-trained therapists who treated me.

[Paul A Nathenson](#), RN, CRRN, MPA, is director of patient care at Madonna Rehabilitation Hospital. He can be reached at [pnathenson@madonna.org](mailto:pnathenson@madonna.org).