Focal Dystonia Treatment Approach

Sara was a vibrant college graduate beginning her career as a graphic designer. One of her favorite parts of her job was creating custom invitations for birthday parties and weddings. She loved playing a small part in people's special days. It truly was her dream job! But as she settled into her budding new career, the annoying “writer’s cramp” that had plagued her since high school intensified. She tried to work through it, but the pain intensified. Sara’s “writer’s cramp” gave a new meaning to the idea that art depends on suffering!!

But Sara was not the stereotypical tortured artist. She visited her doctor about her “writer’s cramp” and was misdiagnosed with De Quervains tenosynovitis: an all too common occurrence for people with Sara’s symptoms. She spent weeks in a cumbersome thumb spica orthosis (splint) which restricted use of her hand during work. It was not an ideal situation for a graphic artist. When the treatment failed to reduce the pain, Sara consulted a board-certified hand surgeon for a second opinion. Finally, Sara was diagnosed with Focal Hand Dystonia, a condition that causes involuntary muscle contractions.

Sara presented to occupational therapy with significant muscle contraction localized to the 1st dorsal and palmar interossei, 1st web space, as well as thenar muscles of her right dominant hand. Her pain measured at a 6/10 and would often radiate to her mid forearm after a long day of work. Pain decreased when she rested her hand, but immediately increased when she began design tasks.

Sara’s treatment included moist heat, soft tissue massage, electrical stimulation to fatigue the muscle, TENS to help with the pain, and adaptation of Sara’s tools (paint brushes, pens, markers). Biofeedback delivered the best results and helped Sara distinguish between muscle contraction and relaxation. Sara progressed to where she could control the contraction on the dorsal aspect of the hand but she was unable to control the volar aspect at rest. As
soon as she began crafting invitations again, the contraction would start and she would have no control.

Sara needed an orthosis that would give her support and apply pressure to the thenar region, such as the deep pressure/trigger point areas. The MetaGrip was the perfect solution! It provided support and gentle pressure exactly where she needed it. Within one week, Sara returned with significantly decreased pain and increased ability to perform the job she loved!

Treating hand dystonia can be frustrating. Interventions may provide relief in a controlled setting, but have limited carryover in the work environment. Sara was not willing to take pain medication. She was not a candidate for botulinum toxin injection or baclofen, which are often used to assist with decreasing symptom severity. I was grateful to have found a new use for the MetaGrip splint, which I primarily used for many of my CMC joint arthritis patients.

As her Occupational Therapist, it was very rewarding to find the “creative solution” that provided comfort and pain relief to a very busy designer.

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