

What Factors Determine Success or Failure in Treating Musician Hand Injury?

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Several years ago I began writing about my experience with the musician's repetitive stress injury focal dystonia and my subsequent rehabilitation with Patrick O'Brien's assistance. As a result of my online articles, approximately 40 people from around the world shared with me their thoughts and stories as they battled focal dystonia, with roughly half of them requesting additional advice or lessons. These musicians range from intermediate and advanced amateurs to working professionals. Many are classical guitarists, like myself, with focal dystonia affecting their right hand, while others include electric guitarists who play using a flat pick, and those whose dystonia is in the left (or fretting) hand. Furthermore, I heard from a trumpet player with focal dystonia in his right hand, and a Persian tar player. Consequently, I have developed insights through my experiences in attempting to impart O'Brien's techniques to these musicians.

O'Brien shares his own story with musician's injury, recovery, and guiding others in a passage in *The Hand* by Frank Wilson, M.D.¹ While recently rereading this excerpt, I found that O'Brien addressed many of the questions and issues I encountered in trying to communicate his ideas to others. Through his words I have a better grasp of why O'Brien's exercises worked so well for me, and why sharing that knowledge has not been as straightforward as I had hoped or expected. I will use O'Brien's words (in italics) from the aforementioned passage as a springboard for my own insights.

On Pain as Feedback

The pain actually helped me in an odd way. I could feel every day whether I was doing the right thing or not, because my hand would feel better or worse. Merely stopping playing didn't help. I stopped for a month; I didn't use my hand for anything for a couple months at one point, and it still hurt like hell.

¹ Frank Wilson, *The Hand* (New York: Vintage Books, 1998), pp. 219–23 and pp. 9–12 this volume.

O'Brien developed tendinitis, which causes great pain when executing the motion that caused it. It is not wholly surprising that in overcoming this disability, he was able to construct a method to help fellow tendinitis sufferers, but it does not naturally follow how he was able to successfully transfer this approach to musicians with focal dystonia.

The foremost reason for the success of his approach with varying injuries is the result of developing a playing technique based on a comprehensive knowledge of the anatomy of the hand: this knowledge can be applied to all musicians, with or without injuries. One radical difference between tendinitis and focal dystonia is that the latter is known for having no (or infrequent) association with pain. Therefore, it would seem that those who suffer from focal dystonia would not have the advantage—if you could call it that—of pain as a tool for feedback for proper movement. With this drawback, it might appear that those with focal dystonia would have no hope of technical retraining. Not only is that not the case, but it is an issue that O'Brien was able to address.

Significantly, one commonality exists between focal dystonia and tendinitis: ceasing to play has no effect on reducing the symptoms. As O'Brien discovered, and as I continue to learn, establishing correct movement is the only way to reduce or eliminate symptoms of the disorder.

Theory versus Practice

When I did finally solve the problem I had no idea how I had done it—I hadn't even a theory. Of course, theories are all I have now, but for a long time I had only the most naïve concept of what I was doing.

While searching for relief from my injury, I learned only a few anatomical terms for the hand and arm. Most literature on the subject of focal dystonia aimed specifically at musicians limits the use of medical terminology (obviously this does not apply within the neurology field, where articles on focal dystonia appear in numerous journals). In contrast, O'Brien studied anatomy in-depth during the process of developing his method, and accordingly was comfortable with anatomical terminology. Nevertheless, in our private sessions he used these terms minimally.

O'Brien's instructions to me were movement-based, instead of scientific descriptions: rather than explain, he demonstrated. His exercises worked, but I had little understanding as to why: as O'Brien himself wrote, "I had no idea how I had done it." What I did have was his

conviction and assurance supporting me. Now, when reading about his approach in Douglas Alton Smith's transcribed lessons² and in the footnotes of *The Hand*,³ I comprehend more thoroughly the theory behind the proper movements I was learning.

The remainder of the excerpt from *The Hand* addresses the criteria necessary for successful retraining.

The Feeling Component: Developing Sensitivity

A considerable part of my work now involves helping injured musicians. The players with the most severe problems usually require changes of technique, changes in the way individual fingers are used, and a very slow, careful imprinting of an entirely new pattern of motion in the hand. In the process of working that slowly, evaluating everything that carefully, listening to the tone of each individual note, just watching the finger move slowly, the injured player will have to begin to change as a person.

This rich passage contains several significant insights. In prescribing a “very slow, careful imprinting of an entirely new pattern,” O’Brien refers to a complete change in the way of movement. The “imprinting” occurs not only in the hand (often called “muscle memory”) but also in the brain. Imprinting, then, is a result of “evaluating everything . . . carefully.” This is the point where musicians with focal dystonia must develop a different system for feedback. Rather than relying on pain to identify faulty movement (as in tendinitis), feedback must first be based upon reducing the signature tremor, shake, or wobble that is characteristic of focal dystonia, and gradually replacing it with increased clarity and looseness of movement. This can only be accomplished by sustained attention to the feeling of every degree of movement.

O’Brien’s exercises create intent through one careful, evaluated stroke at a time. In my case, I could imagine that I had sent tiny, satellite brains down to the tip of each finger and relied on their feedback for further movement. This sensory feedback informed me of correct movement. I learned exactly how my hand should be moving and what the fulcrum is. I would always return to intent. To simply play through the exercises without continuously evaluating the sensation of the fingers renders the work ineffective and pointless. It was this ever-increasing

² Patrick O’Brien, “Lessons with Patrick O’Brien,” ed. Douglas Alton Smith, *Journal of the Lute Society of America*, 47 (2014), 4–73.

³ Wilson, 357–59.

sensitivity that I continued to call upon as I progressed to more difficult techniques and elusive passages.

Because our sessions occurred during an intense, but short, lute seminar, I had very little focal dystonia-related lesson time with O'Brien. We had a couple of 15- to 30-minute discussions about movement, and he demonstrated exercises away from the guitar. We had only one real lesson, with guitar in hand. Moreover, I did not start working on the material until returning home a few days later. When I did, improvement was felt immediately and was immediately convincing. To clarify "immediately," I must stress I was not instantly "cured" and the focal dystonia did not simply disappear. Immediate success was felt in a sudden awareness of the differing levels of symptoms in each finger. Before, what had seemed like a highly confused hand loaded with dystonic symptoms—all fingers and thumb radically affected—was now distinct and isolated levels of clarity (or lack thereof) of movement for each finger. I discovered, by close attention to sensation, that the middle finger was the only dystonic one, and the others—the index, ring, pinky, and the highly impaired thumb—were all exhibiting compensatory, or helping movements. In daily practice sessions, awareness of the movement of each finger increased, and minute increments of tremor and resistance decreased, as my careful evaluation of movement gradually untangled confused impulses.

Within 10 days I was able to experiment with playing pieces, including those with problematic techniques such as arpeggios and tremolos, although I knew by sensory feedback that there were plenty of dystonic symptoms left to untangle. For this reason, I was not enticed to jump solely to repertoire, but returned to O'Brien's exercises to slowly rebuild skills with new movement patterns. The refinement of movement sensitivity is ongoing and continues to be a part of my regular practice. This is the reason I stress to students dealing with focal dystonia that O'Brien's exercises are not meant to be mastered and then discarded, but used as a pathway for long-term improvement. I can now instantly feel when movement is not clear even if my playing has not been hindered. In this way, I prevent dystonic symptoms from accruing over the course of a practice session.

To Change as a Person

They have to let go of a certain kind of goal orientation which has always told them to grip and grab everything as hard as they can, to get ahead in their career. It is as if a misguided life metaphor is visited on them in their

hand. And they have to change. Whereas previously perhaps they dashed their way through things—approximating—they now have to begin to think about every motion. And they must develop a very, very refined sensitivity to what their body feels every time they move it. They have to learn to completely relax between notes, which of course they may never have done before in their lives. Perhaps they have never done that with any part of their personality, in anything they do. They move as fast as they can, play as fast as they can, and turn the metronome up a notch arbitrarily, once every day, force-feeding themselves the instrument.

Even O'Brien knew his program would not work for everyone. The reason for that does not lie in the approach, technique, or theory of it, but in the personality traits of the musician. It is unfortunate and ironic that the habits and personality type that made one a good musician may not help with retraining, but instead may constitute an impediment.

I often wondered why O'Brien's exercises worked so well for me and not for others. I believe the reason is, in part, because I came to those exercises with a tabula rasa, a beginner's mind, which I maintained even as symptoms subsided. I let go of all the previous retraining theories I had tried or heard. But I also had to let go of lingering ideas I had about my playing and what I considered my best features: a strong, powerful stroke and an attractive tone. I never thought I was employing a grip-and-grab technique, but I came to realize that in several subtle ways, I was. Resistance to this "letting go" of what you think constitutes good technique, and of who you think you are as a player, are the largest barriers to overcome for successful retraining.

They have to let all of that go. They may even have to say, "I don't care if I never play a concert again; I just want to be able to play again." There's something really profound about that, forsaking the goal of winning a competition, getting into a conservatory, playing better than the guy down the street, whatever it is. They have to be able to say, "I want to do it, even if only privately, for myself. I'd like to be able to play something simple." These are almost universally people who would never have said that before. They have to stop driving. Some people just can't make that change.

After experiencing marked success in my own case, I was eager to share everything I learned with the focal dystonia community. Looking for the best way to disseminate the information broadly, I posted the material on a website that I created, including detailed explanations of O'Brien's exercises with accompanying video demonstrations, and a

projected timeline for improvement. I sincerely believed that if I put the information out there, people would immediately understand the system and could restrain themselves. Naïvely, I believed that if the information was properly presented, there was no real need for lessons.

While I heard from about two dozen people who let me know that they were experiencing some improvements, and whose questions often led me to creating new videos, I did not hear of anyone who had experienced my level of recovery. I am now beginning to identify the possible reasons for this lack of success.

First, I could not control how a musician might apply the materials I had posted. Even when I received positive reports, I could tell by the comments that they had not bothered to read much (or any) of the accompanying material, which was crucial for establishing what level of feeling was required before progressing to the next video. Instead of following a recommended timeline for progress, frequently all the videos were watched in succession. Material intended as a guided “course,” a process taking from several weeks to several months, was absorbed in one bite.

The second issue with the videos, in general, is that players often were more concerned with emulating the *look* of my hand rather than developing their own awareness of sensation. I had intended the videos merely as a demonstration of the exercises. The practice, or true work, was not in copying the video, but in slowly researching how each finger felt, and learning to incorporate this new pattern of feeling and correct movement. The primary concept of creating a “very slow, careful imprinting of an entirely new pattern” through “evaluating everything ... carefully” was one that I did not sufficiently convey.

Furthermore, the exercises were often approached by way of the student’s former practice habits, mirroring the rigorous execution of repetitive metronome work, practicing longer and harder than recommended, and altering the prescribed movements as a way to quantify improvement. In the process, the few basic tenets of the original exercise were forgotten. I was reminded of the animal from *Dr. Doolittle* called pushmi-pullyu (push-me—pull-you): in adding one new criterion, they would forget the former; correct one movement, re-aggravate another.

One further issue I encountered was a rejection or bypassing of the techniques that did not conform to their perception of accepted practice procedures. While almost everyone who contacted me indicated that they would be happy to return to playing even simple works, the truth was that they discarded techniques that they thought not sustainable in more demanding pieces. An alternate route often adopted was combining select elements of O’Brien’s method with exercises from other methods. To

follow O'Brien's exercises while also adopting criteria or concepts from other approaches constitutes a distraction from O'Brien's intent, muddies the feedback, and renders the "very slow, careful imprinting of an entirely new pattern" unlikely to be achieved. Instead of becoming more sensitively attuned to all the movements and feeling of the hand, they found other goals to focus upon. They could not stop "driving," to use O'Brien's term.

Helping Musicians: Sharing Pat's Work/The O'Brien Method

Having acquired a particular combination of insights—the ability to see into problems in technique—would not necessarily give you the empathy you need to work with other musicians with problems. I went through so much pain in my own situation, such a terrible crisis, wondering whether I was going to be able to play again—what would I do with my life if I couldn't play? There was nothing else I wanted to do as much as I wanted to play the guitar. That gave me considerable empathy for other injured musicians.

O'Brien's emphasis on the significance of having experienced a musician's injury oneself in order to help someone else is not as trivial an idea as it may seem. As more methods and programs develop, practitioners have surfaced who have never experienced the disabling condition. This is not to say that there is no value in other approaches or that they cannot ultimately reinforce each other. The crux is to avoid aimless hypothesizing and to focus instead on scientifically based, anatomical fundamentals that can be disseminated worldwide without distortion. For those of us who have the experience, and therefore the empathy, for the injury, another problem arises in guiding others. Plainly, it is that we are not Pat O'Brien. He had a tremendous gift for pedagogy toward which I can only strive.

After working with people and seeing the difficulties in transferring my knowledge to others, I am more amazed (and grateful) that I understood what O'Brien prescribed and was able to apply it with only a handful of follow-up emails to keep me on course. While my objective has been to unravel the most efficacious way of disseminating O'Brien's method to others, unexpected obstacles indicate that it is more difficult than I had anticipated. The challenge, then, is to seek and identify the many reasons for both success and failure by careful study of all available evidence, and to persist in refining O'Brien's ingenious method, accordingly.

Patrick O'Brien left us no complete statement of his therapeutic method, only isolated comments in print. The attempt to codify the

O'Brien hand-therapy method and apply it to new patients of focal dystonia and other hand injuries is a work in progress, one where we find ourselves at the beginning stage. Among the lingering questions I have are:

- Are in-person sessions required for success?
- Would guided questions suffice—those that direct the student to take stock in how each movement feels, all the while reinforcing correct movement?
- Can a timeline for progress or a finite series of lessons be created that could be applied to most players?

Certainly, I learned that the information must be delivered and practiced piecemeal, in gradual steps, rather than all at once. Whether working with a therapeutic practitioner or on their own, success is dependent on the student's level of compliance with the O'Brien method, their willingness to conscientiously adopt all of its elements and technical aspects, the avoidance of distracting and potentially contradictory alternatives, and the ability to make the crucial personal change of "letting go."

I put forth these experiences, observations, and questions with an invitation to neurologists, therapists, and music instructors to join the discussion. Further investigation of Pat O'Brien's approach is required in order to refine the criteria necessary to achieve a higher success rate of rehabilitation.

Finally, the basic tenets of O'Brien's therapeutic method are pertinent not only to players of guitar, lute, and related instruments, but apply also to pianists, violinists, and brass and woodwind players with hand dystonia (as opposed to embouchure dystonia, which this method does not address). It is not uncommon for music departments to have on their faculty someone who specializes in the Alexander Technique or the Feldenkrais Method. I look forward to a time when conservatories and music departments will also employ a specialist in the O'Brien method, and that the method and techniques he developed will eventually become an integral part of every musician's training.