

Recovering from a Performance-related Left-hand Injury

BY DOUGLAS JAMES

I first met Patrick O'Brien when he gave a talk at the University of North Carolina at Greensboro in 1984 or '85. I can't remember what subject he lectured on, or if I took my first lesson with him then, but I do remember one thing that he said to me at that time that really stuck with me. To paraphrase: "It's not that John Williams does what you do better than you, it's that you and John Williams aren't doing the same thing at all."

My Early Career

My journey with the guitar began as a self-taught electric guitarist, starting out when I was about 12 years old. I was playing various popular genres professionally in and around my hometown of Charlotte, North Carolina, on a regular basis by the time I was 15, and full-time from age 17. Since then I've always managed to make a living in music with a varying mix of gigs, concerts, and teaching. I began serious study of classical guitar at age 19, and began taking lessons in what I now would call the "Segovia system" as it was taught in the 1970s. My teachers during this period in Charlotte were Gus Toole, Michael Mosley of UNC-Charlotte, and Jesus Silva of the North Carolina School of the Arts (now UNC-SA). My technical studies were focused almost completely on the right hand, with lots of rest strokes in the fingers, and all free strokes with the thumb. There wasn't much discussion of the left hand during these years, as I was already in possession of a reasonably facile if overly athletic left-hand technique from my earlier experience on the instrument. In any case, during these years my focus was on getting my right hand to "catch up" technically with the left. Pat O'Brien was the very first teacher I had who had much to say about my left hand. More on that later.

I graduated from the University of North Carolina at Charlotte in 1979 and obtained a master's degree from UNC at Greensboro in 1983, earning both degrees in classical guitar performance. It was also in 1983 that I began a four-year tenure as a visiting artist-in-residence for the North Carolina Arts Council. This was a full-time salaried position administered

through the community college system. From 1983 to 1987 I gave hundreds of performances on classical guitar, and practiced many hours a week to develop and maintain my performance repertoire. I also played electric guitar (bass and standard) in commercial settings during those years.

Study with O'Brien

Very soon after meeting Pat, I began flying to New York City about once a month for lessons. This was made economically practical by People Express airline, which had round-trip fares from Greensboro to Newark for less than \$80, and by Pat generously allowing me to sleep on the large beanbag chair in his midtown studio. The lessons were mostly spent reworking my technique in both hands, with the goal being to make my playing more efficient in general. In these initial sessions, his emphasis was equally devoted to the right and left hands.

For the left, he gave me adduction exercises that I still use all the time with my own students. These consisted of:

- 1) Two- and three-finger combinations working on one string to ensure that the fingers adduct instead of abduct.
- 2) Isometric exercises for the adductor muscles in the hand between index and middle, and ring and little fingers.
- 3) Arpeggios across four adjacent strings using the 24 possible permutations of finger combinations.

The right-hand work focused mostly on repositioning the hand so as to be more over the treble strings, using fewer rest strokes with the fingers, and developing a thumb rest stroke to go with that position.

Progress was gradual and was better manifested in my newer repertoire than in the older. I was much more attentive to my right hand as it seemed to me to be the weakest link in my technique.

The Injury

I'd worked with Pat for just over a year when tendinitis symptoms developed literally overnight in early July 1986. I had recently started using a particularly large Spanish guitar with a 667 mm scale and a fairly stiff action, and had been practicing late into the evening one night after playing a long jazz gig on bass guitar. The next morning I experienced searing pain in my left hand just from lifting a towel off its rack, coming from badly inflamed tendons and ligaments of the index and middle

fingers. More specifically, there was a sharp, burning pain in the index flexor tendon in the finger but also into the hand, and was directly associated with flexing the index finger. (I still have a bit of a node on the index finger tendon. If I move my index finger from the metacarpophalangeal [MCP] joint, I can feel that node if I probe with a finger of the other hand.) The tip joint of the middle finger had similar pain, but seemingly in the collateral ligaments. All of these pains were quite intense—not something one could easily ignore while playing guitar.

Needless to say, I was terribly alarmed and upset. I immediately telephoned Pat, who spent over an hour with me “talking me down.” Rest, ice, ibuprofen, and assurances that it could and would heal were the prescription and prognosis.

The first suggestion one usually gets for treating a repetitive use injury is to immediately stop doing whatever caused the problem for at least a while. However, not playing at all wasn't an option for me at that time as performing was my primary source of income. So, I soon replaced the Spanish instrument with a Millennium-style guitar built by Thomas Humphrey, the famous New York City luthier. The Humphrey guitar was a lot easier to play for the left hand. The scale was still a little long at 660 mm, so subsequently I had Humphrey take the string length down to 650. Once shorter, it took even less effort to depress the strings, and it was easier to maintain the finger adduction that I'd been incorporating in passages requiring left-hand stretches. Since that time I will not play an instrument whose action is stiffer than I like. If anyone hands one of these to me to try, I give it back pretty quickly!

As mentioned earlier, I had been working with Pat on left-hand efficiency, but my main efforts were on refining my right-hand technique, and so the left hand had gotten only secondary attention. My technical practice emphasis now switched almost completely to the left hand. For approximately the next two years, I very deliberately set about fully incorporating the left-hand efficiency principles that I had learned from Pat, while continuing to perform in spite of my compromised condition. I set aside my most left-hand-intensive literature, and spent a lot of time learning to fully apply Pat's principles of left-hand technique that were based on adduction, light finger pressure, and use of the left arm weight in depressing the strings. During that period I had to deal with other limitations even after culling my repertoire. For example, I was not able to use vibrato as freely as I would have liked without pain, especially with the middle finger. The index finger felt discomfort from only moderately long periods of barring, and even simple but fully flexed positions, such as the one used to play a first position C major chord, could hurt. Both

of the injured fingers would really let me know if I was doing something inefficiently—it was the pain that reminded me to lighten up.

Pat called my overall affliction tendinitis. He spoke only a little bit about his own experience with the tendinitis he had contracted in his younger years, as he apparently didn't like to talk much about it. He attributed my problems to trying to play too large an instrument while using too much effort in the left hand, and then trying to force things to happen through sheer will. Prior to the injury I tended to believe that if I only practiced enough, everything would get better. This idea changed completely to a philosophy that all practice should be smart practice: if a passage is physically difficult as opposed to just complicated, I'm either doing something wrong or I shouldn't be doing it at all! In my experience with tendinitis, pain or the lack thereof would tell me when I was or wasn't using good technique. Guided by Pat, I used the perception or absence of pain to focus my recovery and retraining. Simply put, if I was playing with too much effort in my index or middle finger, I would feel pain. I was able to keep practicing and performing during that time through the efficiency gained from the adduction exercises and general awareness of how much effort I was using. It took about three years for my left-hand pain to completely fade away. Today, over 30 years later, I consider myself completely recovered from this injury. Within reason, I am not limited by this sort of concern in the amount of time that I can spend playing the instrument. Furthermore, I always teach these efficiency principles to my students, and to the best of my knowledge none of them has ever suffered left-hand injuries.

The Exercises

Pat's approach to left-hand efficiency was based on three principles:

- 1) Each finger should press no harder than necessary in order to keep the strings against the frets.
- 2) The 1st and 4th fingers should maintain as upright a posture as possible. To accomplish this, one has to use the adductor muscles in the hand more than the abductors. Otherwise, the abductors will cause the fingers to fall outward, and so have less reach than if they were upright. This also can cause the finger to press harder than when it's upright as lateral effort is less efficient than direct downward effort, much as when hammering a nail one gets better results bringing the hammer straight down as opposed to coming down at an angle.

3) The weight of the arm should be used to help in pressing the strings. To this end, supination of the arm is more efficient than pronation. In other words, if one is sending the elbow out away from the body, that weight is being supported by the upper arm and shoulder, and therefore not assisting the fingers in pressing the strings.

These principles do wonders for left-hand efficiency when all three are practiced. Most professional plucked string players today play this way, even if they don't necessarily think about their technique in these terms. It's important to note that in the mid-1980s, lute and guitar pedagogy had not yet advanced to the level it enjoys today. I had never encountered these concepts in private studies, master class settings with famous virtuosi and pedagogues, or in discussion with colleagues before Pat introduced them to me.

Pat gave me three exercises with which to build these principles into my technique, described below.

Single String Pulls

The purpose of this exercise is to develop awareness, control, and strength in the adductor muscles of the 1st and 4th fingers. In the VII position, place 1st, 2nd, and 4th fingers on three consecutive frets of one wound string. While pressing lightly with all three, pull the proximal interphalangeal joint (PIP, the joint in the middle of the finger) of the 4th finger toward the 2nd finger such that it stands perpendicular to the fingerboard, or leaning slightly toward the 2nd finger. Help it along with the right hand if necessary at first. Hold this position for a couple of seconds, and then relax. For the index finger, place the 1st, 3rd, and 4th fingers on three consecutive frets, and perform a similar activity with the index finger pulling toward the 3rd finger.

As one gains facility with these exercises, they can be moved down the neck to lower positions where the distances involved are greater. Similarly, they can later be done with all four fingers placed on consecutive frets. The technical result of this is that one can reach for notes with the outer fingers without the PIP falling to the outside of the hand, which in turn causes the tips of these fingers to have less reach.

Adductor Isometrics

This exercise is performed away from the instrument, and can be done while either sitting or standing. With the arms hanging from the

shoulders in a relaxed position, flex the elbows to bring the hands up, with forearms at about a 45–50 degree angle from horizontal. With a straight wrist, allow the fingers to fall into a flexed position while still being relaxed. From this position, press the PIPs of fingers one and four against the 2nd and 3rd, making certain that the pressure is being exerted by only the PIP as opposed to the entire finger. Developing the adductors in this way will certainly help in making progress with the other two exercises.

This exercise can be done for a minute or less several times a day. With practice, one should be able to give a pretty strong squeeze—you can check this progress by squeezing a finger of the opposite hand. Usually when I first introduce this exercise to students, they have next to no grip strength, and are quite impressed with how tightly I can squeeze using my adductors. Pat once jokingly told me that his left-hand, 4th-finger adductor was the only toned muscle in his entire body.

Four-string Arpeggios

Four-string arpeggios using the 24 possible permutations of left-hand fingers appear below.

Fingering patterns:

1234	2134	3124	4123
1243	2143	3142	4132
1324	2314	3214	4213
1342	2341	3241	4231
1423	2413	3412	4312
1432	2431	3421	4321

Begin in the VII position. Play across the fingerboard from 6th to 4th strings ascending and descending (that is: 6, 5, 4, 3 ascending, then 3, 4, 5, 6 descending) using the right-hand fingering *p i m a m i m i*. For all patterns each left-hand finger stays one fret distant from each adjacent finger. Place each finger as you ascend or descend to the next note, and hold each of the four fingers down until the four-note chord is complete. Then, do the same pattern descending. Note that your left-hand fingers will be creating a “mirror image” of the ascending portion of the exercise when descending.

After playing 6th through 4th in this way, repeat the pattern in the same position on 5th–2nd, 4th–1st, and then 5th–2nd again. Then, shift

one position lower on the neck, and repeat the entire process. Continue until you reach the first position. Repeat the process again with each of the 24 patterns.

At all times focus on playing on the fingertips using light, equal pressure with all of the left-hand fingers while playing *mf* or louder with the right hand. Try to keep the 1st and 4th fingers as upright as possible utilizing the adductors. Keep the left arm in a supinated posture, with the elbow hanging much as a dead weight. Allow this weight to do as much as possible of the work in pressing the strings.