# Recovery From RSI So Far... by Erik Barkley

#### INTRODUCTION

I programmed computers for approximately 13 years professionally before the onset of my injuries. I did notice some tingling in the hands after approximately 11 years of professional work; I bought a wrist pad, the tingling went away, and I thought nothing more of it. I was quite active physically, cycling three times a week and hiking twice a week, and figured that my body could bounce back from any "punishment" imposed.

Then, one afternoon in late June of 1995, while typing, with my usual unconscious horror of a maniacal style akin to a jackhammer, the extensor muscles of my left forearm (the ones on top of the forearm) "bit" me very sharply. And shortly thereafter the same thing happened in the right forearm. Somewhere very distantly in the back of my head, an alarm bell was ringing; however my conscious mind wrapped up with all the importance of meeting deadlines, and keeping "my" project on track successfully muffled that alarm bell. (I was the first kid on the block to design and field a network monitor and control system utilizing new fangled web technology; in retrospect, a dubious and hollow "victory"). I figured that I would just take some aspirin morning and night and everything would be okay.

Over the course of the next ten months, the price of this denial went only up, up, and up. The tingling turned into electricity coursing up and down my arms. I literally lost my grip as my forearms became incredibly weak, to the point of not being able to do my own laundry, drive my car, or even write a check. Pain was a constant companion in my forearms and it had no problems with grip strength. For a while, I could not fully straighten my arms at the elbow. My emotional state oscillated between depression and anxiety; my world collapsed to a small sphere of pain and disability. I could no longer ride my bicycle, or drive to the mountains for a hike. Social events became difficult as I had to bum rides to get more than 5 minutes from my house, and the events themselves tended to increase the pain in my forearms. Dark foreboding thoughts of having to live the rest of my life crippled, in pain, and unable to grasp, literally, the bare essentials of life were becoming omnipresent; how much longer can I keep a roof over my head?, should I start planning to move in with my brother 1200 miles away?, and then what?, just sit around?, etc. I began to dread having to call my friends for just one more favor. And then I lost the use of my thumbs.

In April 1996 my workers compensation case was approved, and I finally began to take seriously and accept the depth of my predicament. What follows is an account of the steps I took and experiences along the way to reclaiming my forearms and hands. There is no strict chronology as such, with many activities and developments occurring in conjunction with one another.

In my recovery you'll find that there is not much mention about doctors. Like most people battling RSI, I sought the advice of more than one doctor, with one of them telling me "it's nothing serious...do some wrist curls to strengthen the forearms". Through following various referrals I did get an appointment with a doctor that I retained before opening my worker's compensation case. Neurological tests where done to determine if there was any nerve damage; none was detected. X-rays were taken to determine if there were any arthritic/structural complications; these revealed nothing out of the ordinary. The diagnosis that I received was forearm tendonitis and early carpal

tunnel syndrome. Although I did not feel the diagnosis was complete (a complete diagnosis would probably also include lateral and medial epicondylitis, DeQuervains disease, and thoracic outlet syndrome, all bilateral) I was at least receiving better advice than "it's nothing serious". With neurological and structural damage ruled out, and therefore surgery, the best the doctor could do was recommend physical therapy, keeping my work restrictions in force over a long period of time, and not cave in to insurance carrier pressure to declare me "permanent and stationery". In other words, the doctor's paperwork carried the official weight required to give me a chance at healing, but the actual healing was entirely my responsibility.

#### **RECOVERY**

My recovery began with taking the month of May 1996 away from work.

# **Physical Therapy**

The first step in this process was sounding out a prospective physical/occupational therapist. I had tried a few weeks of physical therapy several months earlier with less than desirable results. I was encouraged while "interviewing" a perspective therapist over the telephone when she asked if I was familiar with Dr. Pascarelli and Deborah Quilter's book. By that time I had read it and re-read it cover to cover. I was also encouraged during the first session, when she performed a lengthy set of relatively non-invasive tests, thereby being the first person to deduce my thoracic/neck involvement in my tingling fingers.

Therapy began with several months of nothing but heat, stretching, massage, and icing. Heat was applied mostly to the muscle bellies of the forearms. The massaging was deep tissue massage of the forearm muscles and it seemed to make things hurt at first, but subsequent sessions proved to be less and less painful. Gentle stretches included the flexor and extensor mucles of the forearms and the chest and neck area. Icing involved the "bony" areas: the backs of the hands, the thumbs from the first knuckle to about an inch above the wrist, the wrists, and the epicondyles. There were also chin-tuck exercises for my head-forward posture and constant reminders to keep my head on top of and aligned with my shoulders and torso as much as possible. I performed limited massaging, to the best of my abilities, and icing at least three times on the days that I did not go to therapy. Altogether, approximately six hours of each day were devoted to nothing other than taking care my arms. Splints were worn only at night to prevent the wrists from curling up during sleep.

My physical therapist asked me to keep a pain diary consisting of a log of activities performed and a (subjective) measure of the amount of pain that I was experiencing. In addition to these two items I also kept track of how weak my forearms felt. Eventually patterns did start to emerge from this log, and based on them, my therapist would suggest alternate ways to either pace or handle a particular activity of daily living.

As therapy progressed, I was asked to bring my keyboard in. As I started typing, my therapist trained a video camera on my hands. What a lot of excess effort! I could not type for very long, but the videotape revealed a lot of hyper extension; i.e. my fingers kicked out in exaggerated motions.

Towards the end of physical therapy (approximately five months) minor strengthening exercises were introduced for the forearm muscles. These consisted of nothing more than raising the hand back

towards the elbow a few times (while resting the forearm on a table), letting the fingers come in towards the palm, and then turning the forearm over so the palm was facing up, and raising the hand back to the elbow a few times, letting the fingers straighten. These eventually lead to an exercise more geared for stamina, which was gently squeezing a sponge cut to an appropriate size for my hands.

#### Feldenkrais

While I considered myself very fortunate to have an excellent physical/occupational therapist, I was beginning to realize that all the therapy in the world would not prevent me from reinjuring myself if I kept misusing my arms in the same old way. And while the therapist had given me many good points about how to use my hands and arms in typing, along with several pointers in how to cope with activities of daily living, I felt that I needed to address things at a very fundamental level. I had heard good things about Feldenkrais via the Sorehand listserver, and by reading Ralph Strauch's website I became intrigued by the notion that it was possible to re-organize your entire neuro-musculature for more efficient/less effortful movement.

I had my first Feldenkrais "functional integration" session at the end of May 1996. This consisted of lying on a low table while the Feldenkrais practitioner gently pushed and tugged on my body in various directions. I noticed some odd sensations such as one side of my body feeling lighter than the other, one leg feeling longer than the other by the end of the session. Part of me chalked this up as nothing more than mere parlor tricks. And during those first few months of functional integration sessions, my Feldenkrais practitioner's reasoned and sensible insights lent credence to the hands-on pushing and tugging. The discussions would cover areas such as skeletal mechanics (demonstrated with a full-scale model), perception (the choices that we make in filtering and processing information available from our entire being), the image that the mind has of the body and how that affects movement, and that there was a wealth of proprioceptive information for my mind to tap into and learn from.

However, there was still a nagging doubt in the back to my mind that this was nothing more than tricks being played on me. And then, slowly, little by little, I began to notice differences in the way I walk; I noticed that I was starting to go downstairs with the speed and fluidity that I had had as a kid; I noticed that my shoulders were starting to be more mobile in reaching for things, and then I noticed my torso was starting to move to help the shoulders and that my pelvis was starting to move to help the torso. No, these were not parlor tricks; my mind was learning the nonverbal communication of its body that had been so successfully suppressed. More and more of me was taking part in the movements that I made: movement of the hand was not something that the forearms should have to accomplish on their own, for there was an entire body behind them that could be organized to support them if only the mind was aware of the option, saw it as possible, and had the information to carry it out.

#### Hellerwork

By October 1996, although I was making headway with my forearms, I was starting to have similar problems in my feet, and I was also starting to have problems with my shoulders. Having had benefits from an extensive amount of deep tissue massage done on the forearms, and starting to get a sense of how my whole body is truly connected (and susceptible to the same over-tensing pathology that had occurred in the forearms) I was starting to understand that it wasn't just my arms that were at risk

and that similar cumulative damage had probably been amassing throughout my body. Also, Sharon Butler, via the Sorehand listserver, had just released a list of Hellerwork practitioners that had received training specific to RSI; I called and made an appointment with the one closest to me.

I was impressed with the practitioner's ability in isolating the specific muscle fibers that connected from one finger all the way to the elbow, and then work on loosening the fascia involved. After completing an initial set of four sessions for upper body RSI, I proceeded to take the series for the complete body. This proved to be illuminating as I soon discovered that I had held my legs in higher esteem than my arms long before the onset of RSI. I also became aware of the missalignments in my musculoskeletal system; my hips rotated to the left slightly, and my right shoulder further forward than my left. As Hellerwork is a fairly "deep" form of body work it demonstrated (rather rapidly) mind-body connections and how my emotions manifested themselves in my musculature. The practitioner would also ask me a lot of questions specific to the area of the body she was working on; to discover how I felt about a particular part of my body, the injuries that had occurred, etc. There were also "bigger picture" questions dealing with control vs. surrender, activity with purpose and direction vs. receptivity and being and how my body responded. She was very supportive emotionally, and would call just to see how I was doing the day after a session.

I found that Hellerwork and Feldenkrais tended to reinforce one another; the Hellerwork sessions tended to free up the fascia and thereby assist my Feldenkrais exercises, and the knowledge that I was gaining through Feldenkrais allowed me to relax more fully through the Hellerwork session allowing further freeing of the fascia.

# Qi Gong

I started doing Qi Gong after an instructor gave a short class in July 1997 at one of our support group meetings (see below). Qi Gong is similar to Tai Chi, but the forms are simpler, with a focus on health and healing. I've found that the movments are very complimentary to Feldenkrais and, for me, build directly on top of the small movements that are used in Feldenkrais exercises. It also seems to work as a moving meditation as invariably my mind is much calmer after practicing a short 15 minute form. As I continue to practice the forms, I notice that I'm slowly increasing the articulation available in the joints of my body, regaining strength in my upper back and shoulders, utilizing my feet, ankles and legs more effectively for whole body movements, and moving more gracefully in general. A word of caution about Qi Gong: from my experience, you should already have some level of recovery and stamina in your forearms if you are to attempt a strict interpretation of hand postures involved. (You can still perform and learn Qi Gong without adhering to strict hand postures in my opinion.)

#### Meditation

I tried a couple weeks of yoga classes in May 1996. This was far too early in my recovery to be attempting any postures with weight on the hands and arms. However, the basic yoga relaxation pose (laying flat on your back, with the arms slightly extended to the sides and the legs about shoulder width apart) and focusing on the breath seemed to make my arms feel a little bit better. I talked about this with my Feldenkrais practitioner, and he suggested that I use this technique as a method of opening up to the pain. I began setting aside a half-hour before going to bed to explore breathing and the pain sensations. After relaxing on the floor, and getting a good sense of my breath I would then

turn my attention to my forearms. What tended to happen after a while was that the pain could still be there (sometimes it would go away), but that it would no longer hurt. I also started to be able to gauge my overall level of relaxation by how far into my extremities I could feel my breath moving in and out.

# **Support Group**

In April 1996 I signed onto the Sorehand list server and within a couple weeks spotted a post from another person in Los Angeles asking if anyone want to form a support group. I said yes immediately, and soon had two other people, going through similar problems, with whom I could speak. After a few months of informal meetings we decided to get organized and obtained space at a local library. At first our meetings were sparsely attended, but it was not long before we had a group of "regulars." As the group grew it became easier to attract and find people willing to speak about all aspects of RSI, from health, legal, and ergonomic perspectives. I find great benefit in hearing various speakers and their perspective on health and healing at the meetings. Likewise demonstrations of adaptive/assisted technology. And certainly legal advise with regard to workers compensation laws.

# **Nutritional aspects**

In the early stages of my injuries, I found that my forearms would get hungry long before my stomach; they seemed to continually require blood very rich in nutrients. During this phase of recovery I dared not let myself get too hungry, and I made a conscious decision to put my arms ahead of any vanity considerations; as a result I gained 15 pounds. Eventually, this changed and I was able to lower my caloric intake to where I am no longer gaining weight and am slowly losing the extra pounds.

About 14 months ago I completely gave up caffeine. Apart from the first month of caffeine cravings I do not miss it and sleep better.

I have found that moving my diet more towards vegetables seems to make me feel better in general.

As far as nutritional supplements go, mallic acid and magnesium with B vitamins seem to provide a modest increase in stamina. Also, flax seeds (which I grind up in a blender and put on cereal, salads, etc) seem to help.

I also drink a lot of water (minimum a half gallon a day and often more) on the theory that it helps keep the fascia hydrated.

# **Daily Activities of Living**

Getting through the tasks of daily living was most notably an exercise in learning my limitations, pacing with them in mind, and figuring how to make things easier. I had to get used to the idea that doing the laundry was minimally a three-day affair. Day 1: carry laundry downstairs and get about half of it through the washer and into the dryer. Day 2: get the second half of laundry through the washer and into the dryer; if possible carry the laundry back upstairs. Day 3: Sort and put the laundry away — this in itself could require pacing over several hours.

Similarly, the entire process of grocery shopping required multiple days. Never buy very many grocer-

ies at one time (multiple trips per week), carry them into the house in the crook of your elbow — not in your hands, only put away those that absolutely require refrigeration, and put away the remaining groceries over the next day or two. Anything that had a plastic seal on it that required refrigeration after opening was opened before I needed it, and while the seal was still at room temperature, making it easier to open.

I used tools wherever possible: attaching a vicegrips to any handle that required twisting/turning e.g., a can opener. I used a knife or scissors to open everything from letters to cereal boxes. An electric screwdriver helped considerably. A steering wheel cover that made my steering wheel thicker and provided knobby grip sections helped with driving.

As I could afford to (just barely) hire a housekeeper, I did so on a once every three weeks to once a month basis.

## Coping on the job

As noted above, I took the month of May 1996 away from work. In June, I returned to work but only at four hours a day and with very little typing. I was very fortunate to have an enlightened boss who had spent 15 months recovering from back problems and had worked out more or less consultation type assignments. This was helped by the fact that I had been at the same place for over seven years before my injuries, had a proven track record, and a lot of applicable knowledge in my head. Nonetheless, my self-esteem took a beating, as I felt I was back at work far too soon, and was simply resting on my laurels as I could not produce much via the keyboard.

I started to view part of my job as figuring out how I could do my job. This boiled down to ergonomic devices/adjustments, diligent pacing, voice recognition software, and efforts to integrate somatic practices such as Feldenkrais behind the keyboard.

Ergonomic adjustments included lowering my keyboard so as not to encourage dorsiflexion (cocking the wrists back towards the shoulders), putting my monitor on top of a never-referenced thick technical manual so that my head stayed on top of my shoulders, and purchasing a lumbar support to assist in keeping the torso erect and supporting the arms. I also did away with any external support for the forearms. External support seemed to require effort for moving the hand to emanate from the forearms only. With unsupported and free floating forearms I was better able to utilize small movements in my shoulders and torso to help with typing. This was not an easy adjustment as my upper back and shoulders felt very strained at first but in the long run, as I learned and adjusted, it worked out. When resting from typing I will let the forearms be supported.

Becoming proficient with keyboard shortcuts has been helpful when trying to avoid the mouse. I also purchased a Kinesis Keyboard, which alleviates the pronation required of a conventional keyboard, and separates the hands and arranges the keys so that no radial or ulnar deviation (bending at the wrists toward or away from the body) is required. At first, typing on the Kinesis required more effort from my forearms and made them hurt. Once adapted to it, typing with the Kinesis did get easier. I now notice how much easier whenever I have to switch to a conventional keyboard.

I researched voice recognition software and began using DragonDictate for Windows in October 1996. I specifically chose DragonDictate as it seemed to have the most flexibility by allowing control

of the Windows desktop, programing of Unix command line keystroke sequences via its built-in scripting capability, and dictation. The first three months using voice recognition were a disaster for my throat. It hurt for weeks on end. I started to avoid having any extended conversations as I could feel that I had no stamina left in my voice. The biggest mistake that I was making was not keeping a relaxed conversational approach with the Dragon. With the help of some Feldenkrais sessions, I gradually learned to keep my voice relaxed and just let the words come out rather than forcing them out. (A natural consequence of keeping the voice relaxed, at least for me, is a deepening of the voice and more resonance when speaking.) Alternating between voicing and keyboarding has been effective and helps in preventing burnout of either throat or arms. Keeping a glass of room temperature water handy and taking frequent sips keeps the vocal folds lubricated.

I now use two voice recognition products: DragonDictate for controlling/commanding applications, and Dragon NaturallySpeaking for dictating email or technical documentation. Dictating text via discrete recognition is very cumbersome, and in my opinion, prone to voice injuries.

Pacing on both the small and large scale has played a crucial role in my recovery. By small scale, I mean pacing through the day. Helpful in this regard is break/timer software that alerts you every so often to take a break. In January 1997, I started using this type of software in earnest, setting the timer for a break every 10 minutes. For some breaks, I will simply rest my hands or voice, and take a moment to rethink my approach to solving the problem at hand. For other breaks, I will stretch my forearms, or get up and roll my shoulders, etc. (It has been somewhat gratifying to see this behavior catching on with co-workers who have started to notice problems with their arms!) The breaks also offer an opportunity to scan my body, notice what is going on, and attempt to re-center myself.

By large-scale I mean pacing over several months. In consultation with my doctor, the rate at which we increased my work day was very slow. I started at four hours a day in June 1996, then went to five hours a day, then to six hours a day, then to seven hours a day, and finally eight hours a day in late September 1997. If you average it out, its four months between each increase of just one hour a day.

#### What my healing from RSI has felt like

In the books and literature that I researched the slowness with which RSI heals was emphasized. My experience was certainly along those lines. The pattern that I have observed is something like this: at first you manage to get your arms out of constant pain. At this point any small seemingly insignificant use of the hands results in pain again. It can take days or even weeks for the the pain to subside from any misuse of hands at this point (and just about everything seems to be a misuse at this time!). Eventually very small amounts of strength and even smaller amounts of stamina return. Now you can hold a piece of paper for 10 maybe 15 seconds with only minor discomfort, but the discomfort increases rapidly beyond this time frame. It's still takes days or even weeks to recover from a misuse of the hands, but that misuse is now not quite so all encompassing. Things go on this way for what seems like a very long time and then one day for just a small amount of time you seem to have hands and arms that function just a little bit better. You have glimpsed a plateau of functionality slightly higher than that which you currently have and at which you'll soon be arriving. This plateau is claimed, your limits move back slightly and misusing the hands doesn't take quite as long to recover. This pattern of glimpsing a little bit better functionality and then experiencing it as a more or less solid gain keeps repeating itself very slowly.

## Setbacks along the way

In healing from a serious injury like RSI, setbacks are probably inevitable. I had some major setbacks. Including some horrible spasms in the right forearm that would cause my fingers to curl up into a tight fist, hurt like hell, and made it virtually impossible for me to open my hand. And also acutely painful spasms of the left shoulder that took several days to subside. In retrospect, the setbacks were part of the learning process as I became more aware of my body and tried to move differently and would therefore make demands on muscles in different ways than I had previously.

# My situation today

I still have problems with my forearms. Compared to 2 1/2 years ago they are far better. The keyboard is still my number one nemesis (my job does not require much mousing), and I continue to pace myself carefully on the job. For the most part, I'm fairly good about knowing what my limits are, and when I do overstep them a little bit, it usually only results in aching of the forearms which dissipates in 10 to 20 minutes. I still will not type for more than about 20 minutes straight without taking a break. Also, I try to structure my day so that less typing occurs toward the end, or will take longer breaks towards the end of the day. My arms are in the most danger whenever my mind focuses solely on the computer and forgets about the here and now of its body. My old habits occasionally resurface, albeit to a lesser degree, and can result in a definite wake-up call from my forearms the next day, i.e. a little weaker, aching with less activity, and generally lacking a little stamina. When this occurs, I really pay attention and baby my arms and hands, rely more on voice recognition, and usually will be out of trouble within the next day.

One of the happier parts about my recovery so far are all those mundane activities of daily living that I could barely perform (if at all): I can drive, do my laundry, go grocery shopping, do minor house reparis, cook dinner, and wash the dishes all in the same day with little or no pain in the hands/fore-arms. To be able to drive around town and see friends again is great. Weekends are starting to be darn nice again!

I continue with massaging and stretching exercises every morning before going to work, attend a weekly Qi Gong class and practice a Qi Gong form usually the first thing upon getting back home. I also continue to have a Feldenkrais functional integration session every few weeks. I hike about three times a week, and can safely ride my bicycle for a half-hour. And occasionally I will get a massage.

A different perspective about mind and body and health has emerged. I find that I am more aware and mindful of how I go about doing things, much more respectful of those priceless arms, hands, and body in general, and willing to negotiate what the arms feel like they are capable of doing now vs. what the mind wants to get done now. Making time for healthful practices is now a top priority. My mind no longer views the operation of its body as a cut and dried subject; rather, it is much more willing to be a student of its body, be with it, and help it.

# Research/Bibliotherapy

Although it doesn't make the pain go away (by itself), I've found that gaining knowledge about different healing perspectives, how mind and body interact, and what available information there is on

RSI is helpful. Following are some of the books/publications that I have found to be particularly useful/inspiring:

Repetitive Strain Injury: A Computer User's Guide. Emil Pascarelli, MD and Deborah Quilter. John Wiley and Sons, 1994. ISBN 0-471-59533-0

The Computer User's Survival Guide. Joan Stigliani. O'Reilly and Associates, 1995. ISBN 1-56592-030-9

Low-Stress Computing. Ralph Strauch, Ph.D. 1997. (http://www.somatic.com)

Conquering Carpal Tunnel Syndrome and other Reptitive Strain Injuries. Sharon Butler. Advanced Press, 1995. ISBN 1-886867-02-X

Quantum Healing. Deepak Chopra, MD. Bantam Books, 1990. ISBN 0-553-34869-8

Jobs Body: A Handbook for Bodywork. Deane Juhan. Station Hill Press, 1987. ISBN 0-88268-134-6

Spontaneous Healing. Andrew Weil, MD. Ballantine Books, 1995. ISBN 0-449-91064-4

#### **SUMMARY**

Physical therapy (with a good/enlightened/caring therapist) for dealing with RSI during the acute phases of initial recovery.

Somatic practices to make inroads into your way of being, increase awarness, and necessary changes at a deep fundamental level.

Ergonomic devices and assistive technology to impose less external stress on vulnerable recovering tissues.

Diligent pacing of your daily activities including on the job and at home.

A more vegetable based diet.

Accepting that you are injured, that the pain that goes with it is part of you, and learning to work with your limitations rather than against them.

Lots and lots of time required to heal. Be patient. Find a doctor who understands this and is supportive.

Changing life priorities so that health is No. 1.

Recovery and healing involve your entire being (and quite possibly your worldview), not just the arms and hands.

Forming or attending a support group to let yourself know that you're not alone and about the experience of others.

Learn! Both mental and physical changes are required and they are extensive! Be very willing to learn!

## **PRACTITIONERS**

For the benefit of those in the Los Angeles area, I'm listing those practitioners who have helped me along the way.

Occupational/Physical Therapy: Laura Stewart, WellSpring Therapy, 1141 N. Brand Blvd., Suite 504 Glendale, CA 91202. 818.637.2127

Feldenkrais: Ralph Strauch P.O. Box 194 Pacific Palisades, CA 90272. 310.454.8322. rstrauch@somatic.com, <a href="http://www.somatic.com">www.somatic.com</a> <a href="http://www.somatic.com">http://www.somatic.com</a>

Hellerwork: Catherine LeFevre, Alive and Well Center, 540 W. Broadway, Glendale, CA 91204. 888.400.8155. Ms. LeFevre will be relocating to San Francisco, effective March 1998. Her phone number remains the same.

Qi Gong: Revvel Revati, 818.507.4807