



Tendinitis and Tenosynovitis

by Anthony di Fabio

The Roger Wyburn-Mason and Jack M. Blount Foundation for
the Eradication of Rheumatoid Disease

AKA The Arthritis Trust of America®,

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This section should accompany the book *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis* by Anthony di Fabio and Gus J. Prosch, Jr., M.D. See <http://www.arthritis-trust.org>.

The Case of Joe Walker

Joe Walker, age 65, had been a dance hobbyist for seven years when his left ankle began to hurt slightly while participating in a rather strenuous country and western dance called "The Sweetheart Schottiche." As time passed, and the dancing continued virtually seven nights weekly, his foot and ankle became progressively worse, causing great pain usually before and after the dance, but not during the dance.

Aspirin and anti-inflammatories, of course, could have been used to dampen the pain, but Joe didn't care to use those substances, believing — probably rightly so — that simply alleviating the symptoms was not a solution.

Pain or not, Joe Walker continued to dance, and the pain spread eventually to shoulders and neck, until finally Joe was depressed and gloomy, pain-ridden day and night.

Still, dancing was a period of euphoria, a time when pain, depression and gloom could be temporarily forsaken, a palliative treatment not much better than the aspirin would have been. However, while Joe was dancing, the pain eased up considerably, and it was certainly good exercise for the rest of his body.

For one year Joe suffered — and danced — dreading the time when he would be told that he'd need a spinal fusion, and that his dancing days were over.

William Faber, D.O., of the Milwaukee Pain Clinic, Milwaukee, Wisconsin was eventually contacted by Joe Walker, and Dr. Faber referred Joe to a reconstruction therapist closer to his home, James Carlson, D.O. of Knoxville, Tennessee, who specialized in non-surgical sports medicine.

Dr. Carlson began the task of untangling what Joe eventually learned was the equivalent of physical body levers and fulcrums, pulleys and belts, that were twisting Joe's body out of alignment. Joe learned that it was not the muscles that held the body in shape, but rather the ligaments and tendons, and that when these became stretched or torn at their connections, the body tended to compensate in ways unsensed by us, resulting in pain, and often calcium spurs.

Dr. Carlson studied Joe's structure, and determined where to place just beneath the skin certain substances that promoted the growth and reattachment of tendons and ligaments, or tightened them up, where they were lax.

Although it should not have taken more than about six treatments, over a period of several weeks, it took Dr. Carlson and Joe Walker 12 treatments, because Joe's metabolism was low, and his healing rate therefore also low. As Joe could not afford more than one treatment per month, it actually took 10 visits — 10 months —

before he had a day pain-free; and lo! on the 11th and 12th visits the neck and shoulder pain was wholly gone.

Meanwhile, the foot and ankle pain continued, but lessened in degree.

Joe Walker continued returning to Dr. Carlson for treatment on this remaining problem, to finally reach a place where but one condition existed on the foot pain, various portions of the foot's anatomy clearly now being pain free.

Joe, now at age of 71, never did give up his dancing, but slowed down somewhat, from seven nights per week to five nights per week.

Joe began visiting Michael G. Law, D.C., a Fairview, TN chiropractor, who found two of Joe's vertebrae out of alignment, and who began a series of treatments to restore their positions. Over a period of 16 adjustments, coupled with Dr. Law's supplementary treatments designed to strengthen certain muscles and to break up unwanted fibroblasts, and also several additional treatments from Dr. Carlson, using reconstructive therapy, Joe's foot at last became virtually pain free — and he still danced vigorously five nights per week., then finally, newly married and at 78 but one night a week.

What is Tendinitis?

Tendons are fibrous chords that attach muscles to bone or one muscle to another muscle. Tendinitis is inflammation of the lining of the tendon sheath (tenosynovium) and also quite frequently the enclosed tendon, because, while the synovial-lined tendon sheath is usually the site of maximum inflammation, the inflammatory response may involve the tendon itself.

Causation of Tendinitis

Extreme or repeated trauma, strain, or excessive exercise may be causative. By overloading the tendons, irritation and inflammation sets in, causing pain at some point in the covering over the bone (periosteum). When a point on the bone covering continues with pain, the tendon, and possibly the tendon sheath, also become inflamed.

Also, as a result of calcium deposits, the tendon may be the site of primary irritation and inflammation surrounding the tendon sheath.

A body that is subject to other diseased states, or conditions, may exhibit Tendinitis, as described in "Associated Conditions," below.

Clinical Symptoms

Tendinitis, and its often associated symptom, synovitis, is characterized by irritation and inflammation within tendon sheath; light to disabling pain on movement; and tenderness to touch.

Most common sites of inflammation are the shoulder capsule and associated tendons, wrists, fingers, hip capsule and associated tendons, leg ham-strings and the heel tendon (Achilles).

Involved tendon sheaths may be visibly swollen due to fluid accumulation and inflammation, or they may be dry but irregularly contoured, causing friction which is felt on movement of the tendon in its sheath.

Local tenderness may be present, and it may be severe or associated with disabling pain on movement.

Calcium deposition may occur in the tendon sheath, and may be seen by X-ray as "calcific tendinitis."

Foot and Ankle

One of the most common sites of pain from sporting activities is the foot and ankle, usually inflammation of two structures, the Achilles tendon and the fibrous membrane covering and supporting the muscles of the sole of the foot (plantar fascia).

When the Achilles tendon is involved, it's called "Achilles tendinitis," and when the sole of the foot is involved, it's called "plantar fasciitis."

Typically, pain is felt before the physical activity -- such as running or dancing -- and after the activity, but not during the activity.

The pain may be deep and disturbing at night, and can inhibit walking or running, with an inability to place one's weight on the

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heel.

There may also be nodules on the Achilles tendon and nearby.

Continued physical activity without therapy has been associated with complete rupture of the Achilles tendon, even though weight is not placed on the heel.

Activities that place stress on the foot arch or "plantar arch" also stress the covering over the sole of the foot, the plantar fascia, at the sole of the foot, which can lead to inflammation.

Tenderness at the base of the heel bone, the calcaneus, is usually associated with inflammation of the plantar fascia (sole of foot), especially if there is no radiologically detectable bone spurs. This tenderness is usually worst in the morning and as soon as physical activity has begun, but in the middle of the physical activity, the pain subsides.

Heel spurs, of course, can also create chronic inflammation and pain.

If tenderness and inflammation extends to the sides of the heel bone and toward the arch of the foot, this suggests a problem with Ankylosing Spondylitis or Reiter's Syndrome; however, the Achilles Tendinitis and fascial Tendinitis that is seen in athletes can also mimic Ankylosing Spondylitis or Reiter's symptoms.

Shoulder Pain

Raising the arm above the shoulder, or horizontally, as in playing tennis, can produce pain when there is "rotator cuff tendinitis."

The physician will therefore ask that the patient raise arms horizontally, and then overhead, to a palm-up position, to provide a clue for diagnosis.

Persons who carry heavy loads often, arms extended, though the loads are as light as a purse or briefcase, may be affected.

Tenderness will not be in the elbow itself, nor will it limit the range of motion.

Associated Conditions

Tendon sheaths may be affected by systemic diseases, such as Rheumatoid Arthritis, Progressive Systemic Sclerosis, Gout, Reiter's syndrome, and amyloidosis, and can also be associated with elevated blood cholesterol levels (hyperlipoproteinemia).

Inflammation of the fascia (fasciitis), tennis elbow -- where there is strain of the forearm muscles near their origin caused by repetitive strenuous turning of the palm of the hand upward against resistance, as in manual screwdriving, or by violent extension of the wrist as in tennis -- pinched nerves, knee pain, and other symptoms -- may be associated with Tendinitis.

According to Agatha M. Thrash, M.D., Uchee Pines Institute, Seale, Alabama, "A pain on motion or manipulation on the outside joint eminence of the elbow is called tennis elbow. The name derives from the fact that a certain motion in playing tennis puts a strain on the epicondular ligament (a ligament that passes through an eminence in a bone) and causes inflammation. Once the pain gets started it is difficult to get rid of it, as the inflammation continues because of continued movements that put a strain on that particular ligament. A movement that rotates the arm on itself is likely to cause tennis elbow. The diagnosis is made by a typical history and examination."¹⁵

Traditional Treatments

Relief of symptoms is provided by rest of the body part, application of heat or cold, whichever seems to benefit the patient the most, and analgesic or anti-inflammatory drugs used either locally or systemically.

Analgesics such as aspirin or non-steroidal anti-inflammatory drugs (NSAIDS) such as indomethacin, or ibuprofen, phenylbutazone, and cortisone are employed.

If gout is suspected, or other causes of urate crystals lodging in the synovial tubes -- the tubes within which the tendons slide -- then colchicine may be employed. (See "Gouty Arthritis," <http://www.arthritistrust.org>.)

Corticosteroids such as prednisone or hydrocortisone may be injected directly into the tendon and tendon sheath. These might take place every 2 to 3 weeks for 1 or 2 months.

If surgery is required to remove inflamed or calcific deposits, follow-up physical therapy is employed.

Retraining of physical activities may be important whether surgery is employed or not.

What's Wrong With Traditional Treatments?

Applying wet hot or cold packs to the inflamed tendon is probably useful. Although a choice is often given to the patient, depending upon which -- heat or cold -- makes for more comfort, Tom Gervais, Certified Massage Therapist of Franklin, Tennessee, reports that cold packs trick the brain into damping out the pain messages. This works because the nerve fibers that conduct cold signals are larger than other nerve fibers, and so these signals reach the brain first, thus damping out the later arriving pain signals. Ice also reduces excessive local inflammation.⁴

Gervais also reports that warm packs relax tissues and increases blood flow, allowing the body to heal faster through supplying faster nourishment.⁵

Analgesics, non-steroidal anti-inflammatories, and short-term usage of corticosteroids are probably not damaging in themselves, and may assist a person in severe pain to continue daily functioning. The danger comes when any of these drugs are used persistently over long time periods, with all the attendant problems already discussed in earlier sections of the book *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis*. (See <http://www.arthritistrust.org>.)

Obviously, the use of colchicine to remove urates, if present, is important, and useful, but again, as with so many other aspects of traditional treatments, colchicine does not address itself to the causation of the urate deposits.

The idea of directly injecting corticosteroids into the tendon or tendon sheath is probably not a good one, except in dire emergency situations, for all the reasons already discussed in earlier chapters. While relief may be immediate, and dramatic, there will be long-range damage at the cellular level of the cells of the tendons and sheaths.

Surgery should, of course, be limited to "last choices," after every possible consultation with other health professionals. Missing normal body parts always creates additional problems for the future where surgery scars in the body have peculiar effects on the over-all electro-magnetic field of the body, sometimes creating disturbing interference patterns that last a life-time. This phenomena is in addition to burdens developed by the scars themselves, or damaged tissue, through surgery.

Non-Traditional Treatments

Acupuncture

Under a grant from the National Institute of Health, Robert O. Becker, M.D. and Maria Reichmanis, biophysicist, "were able to prove that electrical currents did indeed flow along the ancient Chinese meridians and that 25 percent of the acupuncture points did exist. . . . They reasoned that these points acted as amplifiers to boost the minute electrical signals as they travelled along the body, and that the insertion of a needle could interfere with that flow and thus block the stimulus of pain."³

According to The World Health Organization, there are 104 different conditions "that acupuncture can treat, including migraines, sinusitis, the common cold, tonsillitis, asthma, inflammation of the eyes, addictions, myopia, duodenal ulcer (damaged mucous membrane in a portion of the small intestine) and other gastrointestinal disorders, trigeminal neuralgia (a severe fascial pain), Meniere's disease (ringing in the ears coupled with dizziness), tennis elbow (usually tendonitis or synovitis), paralysis from stroke, speech aphasia (loss of language abilities due to brain damage), sciatica, and Osteoarthritis."³

Although acupuncture has already been proven to be useful in treating various conditions, according to Dr. Yang Jwing-Ming, author of many books on ancient oriental Qigong (pronounced "Chee Gong") -- the science of working with bodily bioelectrical energy referred to as Chee or Qi -- the primary function of acu-

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puncture is to help restore the body's energy balances, which in turn, brings about optimal health.¹¹

Bee Sting Therapy

The International Apitherapy Study begun in 1983, has gathered follow-up data on more than 12,000 bee stung patients. Within 30 seconds of a sting, Tennis Elbow pain can disappear, and the pain of the sting is gone, too.²⁰

(See *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis*, <http://www.arthritis-trust.org>.)

Boron

Rex E. Newnham, N.D., D.O., Ph.D. writes that for Tendinitis "I generally use a product containing chondroitin sulphate, a soluble form of beef cartilage, and I always use it in conjunction with the boron tablets. It takes about a month to show benefit."¹⁴ (See *Away With Arthritis* and "Boron and Arthritis," <http://www.arthritis-trust.org>.)

Enzyme Therapy

As there is often a nutritional basis to the body's inability to repair itself rapidly, enzyme supplementation, along with proper diet, may be important. (See "Enzyme Therapy," <http://www.arthritis-trust.org>.)

Food Allergies and Chemical Sensitivities

The Case of Jerry Mandrell

Warren Levin, M.D. of New York City, describes Jerry Mandrell as a man with painful heel spurs who had been the rounds on cortisone injections and other traditional treatments, none of which were effective. Following Dr. Levin's directions, Jerry was tested for food allergies, and taken off of those he was sensitive to. Dr. Levin also recommended anti-oxidants, essential fatty acids, and other good dietary approaches. Pain disappeared because, contrary to popular belief against it, the heel spurs were reabsorbed by the body.⁸

Inflammation of tendons or their sheaths may be a result of food allergies or chemical sensitivities. (See "Allergies and Biodetoxification for the Arthritic," <http://www.arthritis-trust.org>.)

Herbs

As a safe alternative to damaging analgesics and non-steroidal anti-inflammatory drugs, equal parts of tinctures of willow bark, cramp bark and prickly ash can be taken one teaspoonful three times per day, for pain relief.³

Homeopathic Treatment

Various homeopathic remedies must be designed to fit the individual for the moment, considering their personality, constitution and physical condition.

Some physicians have found that effective homeopathic remedies often include *Aconite*, *Thuja*, *Ruta graveolens*, *Belladonna* and *Apis mellifica*.³

Dr. Andrew Lockie¹³ recommends to be taken 4 times daily for up to 7 days, the following for Tendonitis:

Rhus toxicodendron 6c for tearing pain aggravated by rest, movement, or damp weather, which wears off with continued movement.

Ruta 6c for tearing pain, lameness, when affected ankle feels bruised and broken.

For Tenosynovitis, to be taken every 2 hours for up to 10 doses in acute cases, Dr. Lockie recommends:

Apis 30c for affected finger that is hot and swollen with stinging pains.

Arnica 30c followed by *Ruta* 6c when the condition is caused by an injury.

Bryonia 30c when the slightest movement makes the fingers hurt.

Rhus toxicodendron 6c for affected swollen finger when movement is more painful after rest and in cold damp weather, eased by warmth and gentle movement.

Dr. Lockie recommends, to be taken 4 times daily for up to 14 days if condition is chronic (if no improvement within 14 days, see

your doctor or homeopath):

Causticum 6c for chronic situation.

Keith McElroy, M.D. Injection Therapy

The Case of Genevieve Watkerson

Genevieve Watkerson was described by Dr. McElroy as "a nice lady from Long Island with rather severe pain in her right leg, which she felt was primarily in her knee. An orthopaedist had recommended an operation on her knee; however, I could feel no tenderness in that knee, and all of the knee tests were completely negative. She did, however, walk with a limp favoring that leg.

"On careful examination, I detected that she had a very specific tenderness over the right gluteus medius tendon which is located in the buttock.

"I gave her an 'Injection Therapy' into that tender spot and, lo-and-behold, her knee pain completely vanished after injection of the local anesthetic into the buttock, a long way from the knee."

Dr. McElroy describes this phenomena of remotely located tender spots appearing painful elsewhere as "referred pain."

Intraneural Injection Therapy, The Surgical Alternative

Gus J. Prosch, Jr, M.D., who pioneered -- along with Roger Wyburn-Mason and Dr. Paul K. Pybus -- in the development of Intraneural Injections described in Chapter I, Osteoarthritis, does not believe that Tendinitis is caused by the same organism(s) believed to be the source cause of Rheumatoid Diseases. He says, "I have had Tendinitis clear up in patients by the use of Intraneural Injections.

"I treat patients every week for Tendinitis. The first thing I do is use Intraneural Therapy, but sometimes I may use Sclerotherapy on them."¹⁸ As these two treatments, Intraneural Injections and Sclerotherapy (Proliferative or Reconstructive Therapy) cannot be mixed, it will depend upon the apparent cause of the inflamed tendon or synovium. (See *Intraneural Injections for Rheumatoid Arthritis and Osteoarthritis*, <http://www.arthritis-trust.org>.)

Dr. Prosch has trained more than 300 physicians in the use of Intraneural Therapy, but most of them, he explains, are too frightened to step outside of so-called "approved" or "traditional" treatments because they might get in trouble with those who control their licenses. At the end of the day of training they'll comment with amazement, "You're getting these people well! These are the same patients we have to send home and tell them to live with their pain."

Very similar, if not identical to, the Prosch/Pybus/Wyburn-Mason Intraneural Injections, Keith McElroy, M.D.¹⁰ -- Clinical Professor of Orthopaedic Surgery at Columbia Presbyterian Medical Center & New York Orthopaedic Hospital, College of Physicians and Surgeons, Columbia University, Bronxville, New York -- uses his own discovery of what he calls "Injection Therapy" in his clinical practice to solve various forms of Tendinitis, also sometimes called "Bursitis." (See "Soft Tissue Arthritis: Bursitis (Fibromyalgia; Fibromyositis; Fibrositis; Rheumatism)", <http://www.arthritis-trust.org>.)

Dr. McElroy writes: "Injection Therapy is a surgical procedure performed on an out-patient basis in the doctor's examining room. It's used primarily to treat Tendonitis-Bursitis. These are very common in the low back, buttock, shoulder and knee areas, but in over 40 sites in the body can be cured by this form of treatment.

"The target area is re-examined prior to sterile preparations of the skin. Sterile techniques are maintained, including use of sterile instruments, gloves, etc. The local anesthetic agent is 1% Xylocaine® (lidocaine hydrochloride), an anesthetic that stabilizes the nerve membranes. Additional tests are then performed.

"The medication (Hydrocortone®) is infiltrated into the anesthetized zone using the same needle through which the Xylocaine was infiltrated. Cortisone is dangerous, Hydrocortone (hydrocortisone sodium phosphate) is not at all dangerous." It acts locally, without creating systemic problems created by the use of cortisone, and it helps the cells which are damaged to heal more rapidly.

"The success or cure rate with this procedure is usually pro-

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portional to the duration of the symptoms prior to treatment. Those patients with several sites of Tendonitis undergo one therapy at a time. If the symptoms have been present for less than two months, usually one injection treatment cures the condition, but if the duration of pain is a year, several more may be required. The need for additional injections is based on the amount of improvement received by each injection.

"Surgical intervention is never required for these bursitis/tendonitis conditions."

The Case of Elsie Davidson

Harriet Davidson, 55 year-old patient of Dr. McElroy's, described the good success of Injection Therapy on her 24 year old daughter, Elsie. About five years earlier Dr. McElroy had cured Elsie, who had been diagnosed as having a herniated disc. Harriet said, "Elsie was admitted to a New Jersey Hospital and for two weeks received daily physiotherapy, pelvic traction, the traditional works. When this therapy failed to reduce her sciatic pain, she was placed on the operative schedule to have her ruptured disc removed.

"I signed her out of that hospital against medical advice and brought her to your office."

According to Dr. McElroy, "On very careful examination Elsie was completely negative from the neurological standpoint, but she had very specific localized tenderness over the gluteus medius tendon in the buttock. The diagnosis of a ruptured disc was, therefore, not at all possible.

"I gave her one injection therapy into the tendon of the gluteus medius.

"She had been scheduled to be married three weeks later and they had started to cancel the wedding arrangements, but the next morning she walked into breakfast and jumped up and down and said to her mother, 'I'm pain free, I feel great, cancel no more, we're going ahead with my marriage.'

"Elsie and her husband went to Bermuda on their honeymoon. She played tennis, rode bicycles and had a wonderful time with no recurrence of her pain.

"The good news is that Elsie had two normal pregnancies."

Injection Therapy is a Conservative Treatment

Dr. McElroy has several times lectured on Injection Therapy in the United States and in Europe. In his view, "Many physicians have never heard of Interspinous Ligamentitis (inflammation of ligament within spinal column) or Sacrospinalis Tendinitis (near top of buttocks) as a cause of back pain, nor of Gluteus Medius Tendinitis (near center of buttocks) as a cause of sciatic pain. However, these conditions can readily be diagnosed by a careful examination. They may be cured by conservative therapy, primarily Injection Therapy, and they do not require expensive X-rays such as CAT (Computerized Axial Tomography) scans, Bone Scans (radioactive tracer substances that infiltrate bone material), or MRI (Magnetic Resonance Imaging) tests.

"For each injection to be curative or helpful," Dr. McElroy explains, "the needle must be placed in the exact spot of the irritation and swelling. This is determined by a very, very careful examination to locate the exact spot of the localized tenderness. This spot is almost always very small and only about the size of a thumb nail."

Curt Maxwell, D.C., N.M.D., Algodones, Mexico (across from Yuma, AZ) has a flow of Americans who cross the border for similar effective "Intra-neural Injection" treatments. Although following the Pybus method, he's learned that the use of depot medrol is not necessary, consistent with Dr. McElroy's method.

Light Beam Generator, Omega Ray, Electro-Acuscope/Myopulse System, and the Photon Sound Beam

The Light Beam Generator

The Vodder Manual Lymph Massage --a light stroking of the lymph system designed to hurry the flow of lymph -- can be used by itself to reduce many cases of Tendonitis. However, when used with ELF Laboratory's Light Beam Generator -- a device that emits negative electrons stimulated by pulsing radio frequen-

cies -- many cases of Tendonitis reduce within 20 minutes. The Light Beam Generator, also may be used by itself to reduce swelling and pain.

The author twisted an ankle, which obviously created pain and swelling. No treatment of any kind was applied to the ankle, and the ankle was used heavily that night. The next morning, on arising, it was almost too painful to hobble about, and swollen further. Within twenty minutes usage of the Light Beam Generator, the pain was gone and the swelling reduced to normal. There has been no problem with the ankle since that day, many months later. (See "Lymphatic Detoxification," and "Lymph Drainage Therapy," <http://www.arthritistrust.org>.)

The Omega Ray

The Omega Ray is a more advanced version of the Light Beam Generator, having the ability to generate a random pattern or varying cycle of frequencies, the advantage of which is that the body will find and use only those frequencies most effective for it. Because of this variability, it is less likely that the body will accommodate or become resistant to the energy. It is also reported to be gentler than previous instruments.

The Electro-Acuscope/Myopulse System

As reported in *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis* (<http://www.arthritistrust.org>), the Electro-Acuscope/Myopulse System will address internal organs through micro-acupuncture trigger points that lie along meridian lines, as well as provide through controlled flow of current, a more rapid healing rate than the Light Beam Generator.

The Case of Cassie Summers

Stephen Center, M.D.²² of San Diego, CA, reports on 15 year-old, ninth grader, Cassie Summers', whose Achilles tendon pain (bilateral) (worse on the right) was associated with hip joint pain (bilateral hip joint and anterior iliac crest).

The hip pain had begun eight months earlier, and the ankle pain had begun a month earlier. As Cassie was a member of her high school track team, competing in one to two mile races, and also ran cross country, this kind of pain was a real disturbance.

She was found on examination to have chronic muscle contraction headaches with possibly a vascular component, a condition consistent with her ankle/hip diagnosis.

Dr. Center started Cassie on a course of therapy using the Myopulse instrument applied locally, directly related to one of the bursae (retrocalcaneal) and the achilles tendon. Similar treatment was used on a muscle (tensor fasciae latae muscle) and also on four points on the kidney and bladder meridians that also traverse the heel bone (calcaneum) region. This treatment was applied to both ankles and the right thigh.

"Within two treatments the ankle symptoms were largely abated. The patient received a total of seven treatments . . . [and] at that time she was entirely asymptomatic and discharged."

Cassie returned again eleven months later complaining of shin splints, and, although a stress fracture was suspected, Dr. Center found x-rays negative. "We decided to see how she responded to a course of electrical stimulation. She received five treatments over a period of two weeks and was discharged without symptoms."

"Cassie continued to run cross-country and track, and reported no further symptoms in the last seven months."

The Case of Jerrie Armstrong

Jerrie Armstrong, 22 year-old tennis player, complained to Stephen Center, M.D., of a right ankle in pain for three months in four locations. She didn't recall any specific injury, but played tennis regularly, and also frequently exercised on a stair-climbing machine.

Three years previously she'd sprained her ankle on the same side that she occasionally experienced pain when walking, but especially when sprinting. The onset of her symptoms was gradual.

X-ray examination was negative, and examination of the appropriate parts of the anatomy of her foot showed no ligamentous instability and no tenderness, effusion or edema.

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Dr. Center diagnosed Jerrie as having synovitis, arthritis, or osteochondritis.

Jerrie was started on a non-inflammatory drug and advised to avoid tennis. After referral to an orthopaedic surgeon (and another for a second opinion) exercises were recommended with follow-up x-rays. She was given exercises to strengthen certain muscles of her leg.

Because Jerrie continued to report persistent pain symptoms, further diagnostic testing revealed chronic ankle instability, and she underwent a tendon transfer procedure to correct this instability.

After the operation Jerrie experienced pain and stiffness, and other problems. Now she was diagnosed as having "post-operative neuralgia and post-immobilization stiffness," and she was started on therapy in Dr. Center's office using the Electro-Acuscope applied to her ankle and to associated acupuncture trigger points along appropriate meridians.

Jerrie received three treatments the first week and her incisions became less tender.

By the next week she was walking without a limp for the first time, and she was seen at weekly intervals for five weeks thereafter.

After one month, "during which she was doing quite well," she returned with residual tendon discomfort.

Jerrie received six treatments over the next two weeks, with only slight residual achilles pain after walking for over a mile.

"She received three additional treatments over the next month, with complete cessation of all symptoms," and was released from treatment, having no residual pain or stiffness in the ankle or foot.

Jerrie resumed playing tennis and her other aerobic activities without further problems.

The Photon Sound Beam

This new instrument utilizes both sound and light in gas tube technology to achieve similar results to those described in The Light Beam Generator and the Electro-Acuscope therapy.

Telephone Numbers and Addresses as of 1997: The Light Beam Generator, ELF Laboratories, RR #1, Box 21, St. Francisville, IL 62460, (618) 948-2393; the Omega Ray and Photon Sound Beam, Sunshine Company, 223 W. 3325 N, North Ogden, Utah 84414 or Energize! Products, Inc., PO Box 286, Hastings, MI 49058 (616) 948-9732, Fax (616) 948-8703; Electro-Acuscope/Myopulse System, Electro-Medical Incorporated, 18433, Foundation Valley, CA 92708; (800) 422-8726; (714) 964-6776.

Magnetic Therapy

William Philpott, M.D. has developed excellent magnets and treatment protocol for almost every physical problem, including Tendinitis and Synovitis. The body apparently interprets a negative magnetic field (South seeking magnet) as a signal to began healing tissues, and a positive magnetic field (North seeking magnet) as a signal to break down tissues.

Thousands of people have effectively used magnets to dampen pain caused by Tendinitis, and other causes. (See "Magnetic Resonance Bio-Oxidative Therapy for Rheumatoid and Other Degenerative Diseases," <http://www.arthritis-trust.org>.)

Mineral Infrared Therapy

Dr. Tsu-Tsair Chi has reported on an infrared ceramic-coated device that has beneficial effects in strengthening the immune system, decreasing pain, unblocking lymph channels, increasing circulation, and providing lacking trace elements.¹² (See *Osteoarthritis: Little Known Treatments*, this Foundation.)

Nutritional Therapy

Vitamin B₆ supplementation was highly recommended by John Marion Ellis, M.D.⁶, as he was able to demonstrate through valid scientific studies that most Americans suffer from a deficiency in this vitamin which leads to various forms of Tendinitis and Tenosynovitis.

Other supplements recommended are vitamin B complex, vitamin C with bioflavonoids, oral copper, manganese, bromelain, essential fatty acids, cod liver oil, D-phenylalanine and/or calcium/magnesium, vitamin E and selenium.³ (See *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis* (<http://www.arthritis-trust.org>))

Qigong for Arthritis¹⁰

The balancing or distribution of bioelectrical energy to body parts in need can be an important therapy. (See *The Healer Within, Qigong for Arthritis*, <http://www.arthritis-trust.org>.)

Reconstructive Therapy (Sclerotherapy or Proliferative Therapy)

Where Can Reconstructive Therapy be Used?

One of the most frequent causes for Tendinitis/Synovitis is overuse of certain joints and tendons, as found in sports activities and in repetitive, overstraining workloads.

One of the most important and significant treatments for Tendinitis/Synovitis is that of Reconstructive Therapy (Sclerotherapy or Proliferative Therapy), according to William J. Faber, D.O. of Milwaukee, Wisconsin, and Morton Walker, D.P.M., widely read medical reporter.⁵

Reconstructive therapy eliminates the need for drugs or surgery, stimulates the body's ability to heal itself, has virtually no side effects when done properly by trained physicians, and results in permanent pain relief.³

According to Drs. Faber and Walker, it can be used for Osteoarthritis, back and neck pain, torn ligaments and cartilage, degenerated discs, migraines, Bursitis, Carpal Tunnel Syndrome, Achilles tendon tears, tennis elbow, rotator cuff tears, bunions, and a wide range of musculoskeletal problems caused by failed surgery, compression fractures, degenerated disks, polio, and muscular dystrophy.^{3,5}

"Reconstructive therapy is also recommended for weak joints; joints requiring a brace, joints that continually pop, snap, and grind; or joints that cannot maintain alignment (particularly when chiropractic or osteopathic manipulations fail to help.)"³ (See *Sclerotherapy, Proliferative Therapy, Reconstructive Therapy, Treatment of First Choice for Osteoarthritis and Other Arthritic-like Pain, Pain, Pain Go Away, and Prolo Your Arthritis Pain Away*, <http://www.arthritis-trust.org>.)

The Case of Salinas Canuel

Salinas Canuel, 32-year-old dentist, was finally recovering from Rheumatoid Arthritis when he had a complete rupture of the Achilles tendon while playing tennis. The diagnosis was confirmed by use of ultrasound.

When Salinas' orthopedist recommended surgery, instead Efrain Olszewer, M.D., and his associates in Sao Paulo, Brazil, recommended reconstructive therapy (prolotherapy or sclerotherapy) as a first trial treatment, rather than the potentially damaging operation.

Over the tendon -- in the proper locations -- Salinas received injections 6 times weekly using phenol, glycerol, saline solution and dextrose. This mixture created an inflammatory response which increased the body's construction of fibroblast formation. Fibroblast is a connective tissue.

"After 4 months, Salinas Canuel returned to play tennis, and the ultrasound check showed a complete recovery of the Achilles tendon," according to Dr. Olszewer.¹⁷

The Case of Melissa Parkerson

Forty-seven year-old Melissa Parkerson was found by Ross A. Hauser, M.D.²¹ to have noticeable ligament sprains about the knee. She'd had a history of left knee problems which had increased over the previous 3 weeks, and she was wearing a knee brace because her left knee didn't feel stable.

Dr. Hauser administered prolotherapy (reconstructive therapy or sclerotherapy) injections to two ligaments (medial and collateral).

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When Melissa returned about five weeks later, she reported that her left knee was popping less. The ligaments were noticeably stronger. Prolotherapy injections was then repeated.

Melissa's knee is currently strong and she feels great.

The Case of Stacy Pallant

Stacy Pallant had his automobile hit at greater than 100 miles/hour, and he suffered a significant whiplash injury from which he developed neck pain and stiffness. Despite traditional medications and physical therapy, Stacy continued to have pain. As Stacy worked full-time as a carpenter, it was difficult for him to look up and to move his head.

Dr. Hauser²¹ determined on Stacy's first examination that he continued to suffer from ligament and tendon strains from whiplash injury. Prolotherapy injections were administered, and a month later repeated.

After the first injections, Stacy felt better. Within three months of the first treatment, Stacy's neck was completely well except one very small spot that needed additional injections.

Stacy has been well since, working full-time as a carpenter.

The Case of Billy Moorehead

Billy Moorehead, 38-year-old plumber, complained of significant shoulder pain. Ross A. Hauser, M.D.²¹ diagnosed Billy as having rotator cuff tendonitis (supraspinatus tendonitis). Prolotherapy injections were begun to strengthen the rotator cuff tendons (at the shoulder).

In 6 weeks Billy felt much better. The injections were repeated.

After 6 more weeks, all pain had subsided. Billy had no difficulty doing the normal plumber duties, and he's stayed well since.

Telephone Numbers and Addresses, 1997: Ross A. Hauser, M.D., Caring Medical & Rehabilitation Services, S.C., 715 Lake Street Street, Suite 600, Oak Park, Illinois 60301; Telephones (708) 848-7789.

Ross A Hauser, M.D., who has successfully treated thousands of patients, also contributes to a charity clinic in Thebes, Illinois.

Tennis Elbow (Epicondylitis)

Gus Prosch, Jr., M.D. describes Tennis Elbow as a rotation of the arm. The muscles that control it are attached near the elbow, to the radius. "When people play tennis they're turning that wrist, or perhaps turning a screwdriver a lot. When Tendinitis occurs in that particular area, it's called Tennis Elbow. Overuse of twisting the wrist causes inflammation. It can happen in the elbow, or in the wrist itself. Even Carpal Tunnel Syndrome has a small component of Tendinitis.

"I successfully use Proliferative Therapy on Tennis Elbow."¹⁸ Agatha M. Thrash, M.D.,¹⁵ Uchee Pines Institute, Seale, Alabama suggests for Tennis Elbow, the following:

"For this affliction a very simple yet most effective method of treating it is that while wearing the tennis elbow band just beneath the elbow, firm rubber bands large enough to put all five fingertips into the band can be used to abduct (open; move apart) the fingers. The fingers are separated at least an inch. If one rubber band is not sufficient to give a strong resistance, use two or three rubber bands. The exercise should have 15 to 20 repetitions every 3 to 4 hours throughout the day for 1 to 2 weeks. It is also good for Carpal Tunnel Syndrome in many patients.

According to Dr. Thrash:

- Pain and tenderness in the elbow and weakness of the hand, with discomfort in gripping objects, may be the primary symptoms.

- Rest and greatly reduced activity represents the basic treatment in this disorder.

- Do not rest for a great length of time, as more than 2 to 4 days can result in muscle shrinking and stiffness.

- An ice massage for 20 to 90 minutes daily, depending on the severity of the pain, can relieve pain. Ice applied 30 to 90 minutes daily over the painful areas causes soothing, and encourages

healing.

- A hand gripper, used 5 to 10 minutes 4 times a day, with the elbow straight and the wrist bent outward to stretch the tendon, aids in healing and strengthens the muscles. This will prevent stiffness and contracture of the extensive tendons, making it difficult to close the fingers.

- Vigorously rubbing the elbow and forearm in the painful areas, can be very helpful. Rubbing on Aloe vera gel or cream prior to massage, enhances the healing benefits.

Robert Bingham, M.D. reports that YuCCA Plant extract, Aloe Vera, contains a natural form of cortisone.¹⁶

- Locating trigger points (especially tender spots) in the painful muscles, both of the arm and forearm, applying firm pressure for 7 to 10 seconds, and moving in ever-widening circles, taking point by point to relax the trigger points, although painful while the pressure is being applied, can exert a healing benefit.

- A tendon stretch, made by extending the arm so the hand is on the outside of the knee while sitting, then turning the closed fist to the extreme lateral (outside) direction, will exert a stretch on the muscles on top of the arm. The stretch can be increased by assistance from the opposite hand. Repeating the stretch several times daily accelerates healing faster than most self-induced treatments.

- Four to 6 weeks of daily exercise using a 3 pound weight, with the palm down, arm on a table, lifting the wrist upward and rotating slightly outward, and holding 5 seconds. Return to the palm down position, grip the weight again, lift and rotate until 3 pounds can be lifted 15 times with ease. Then increase the weight 1 pound at a time, until 8 to 10 pounds can be lifted without pain.

- Another helpful exercise begins with the arm downwards, holding a dumbbell and rotating the forearm 180° to bring the dumbbell into the horizontal position. Repeat 15 times.

Tennis Elbow (Lateral Epicondylitis)

Dr. Thrash recommends that "Aloe vera be rubbed into the skin over the elbow over a distance of approximately 6 inches square, allowed to dry, and reapplied the second time using about 15 minutes of firm but gentle rubbing of the area.

"Rest, especially restricting the rotational movement of the arm, can be healing.

"Massage is the treatment of choice for most cases of tennis elbow. Use liniments containing arnica or menthol as a massage oil. Aloe vera ointment is a good massage lubricant to aid healing of tennis elbow. Stretching exercises for all muscles having tenderness around the elbow can hasten healing."¹⁵

(See *Home Remedies*, <http://www.arthritis-trust.org>.)

References

1. *Textbook of Internal Medicine*, J.B. Lippincott Company, East Washington Square, Philadelphia, PA 19105, 1989.

2. *The Merck Manual of Diagnosis and Therapy*, 16th Edition, Merck, Sharp & Dohme Research Laboratories, Division of Merck & Co., Inc., Rahway, N.J., 1992.

3. Burton Goldberg Group, *Alternative Medicine: The Definitive Guide*, 2nd Edition, Future Medicine Publishing Co., Celestial Arts, PO Box 7123, Berkeley, CA 94707, 2002.

4. Personal interview, Thomas Gervais, Certified Massage Therapist, Nashville, TN, 1995.

5. William J. Faber, D.O., Morton Walker, D.P.M., *Pain, Pain Go Away*, ISHI Press International, 78 Bonaventura Drive, San Jose, CA 95134, 1990. Also see Ross A. Hauser, M.D. and Marion A. Hauser, M.S., R.D. *Prolo Your Pain Away*, <http://www.arthritis-trust.org>.

6. John Marion Ellis, M.D., *Free of Pain*, National Headquarters, Natural Food Associates, 1988.

7. William H. Philpott, M.D., Bio-Electro-Magnetics Institute, Institutional Review Board, 17171 S.E. 29, Choctaw, OK 73020.

8. Personal interview with Warren H. Levin, M.D.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

10. D. Keith McElroy, M.D. received information through personal correspondence.

11. Dr. Yang Jwing-Ming, *Qigong for Arthritis*, YMAA Publication Center, 38 Hyde Park Avenue, Jamaica Plain, MA 02130, 1991.

12. Dr. Tsu-Tsair Chi, N.M.D., Ph.D., *Mineral Infrared Therapy*, Chi's Enterprises, Inc., 5465 E. Estate Ridge Rd., Anaheim, CA 92807, 1993.

13. Dr. Andrew Lockie, *The Family Guide to Homeopathy*, Fireside, Rockefeller Center, 1230 Avenue of the Americas, New York, New York 10020, 1989.

14. Personal communication from Rex E. Newnham, D.O., N.D., Ph.D., November 6, 1995.

15. Personal communication from Agatha M. Thrash, M.D. November 2, 1995; also see *The Physician and Sports Medicine* 22 (9); 29, September 1994; *Blood Viscosity in Heart Disease and Cancer*, Editors: L. Dintenfass, G.V.F. Seaman, Pergamon Press; 1981; also *Home Remedies*.

16. Robert Bingham, M.D., *Fight Back Against Arthritis*, see <http://www.arthritis-trust.org>.

17. Personal communication from Efrain Olszewer, M.D. received November 17, 1995.

18. Personal interview with Gus J. Prosch, Jr., M.D. November 21, 1995.

19. Jwing-Ming Yang, *Arthritis -- The Chinese Way of Healing and Prevention*, YMAA Publication Center, Yang's Martial Arts Association (YMAA), 38 Hyde Park Avenue, Jamaica Plain, Massachusetts 02130, 1991.

20. Dava Sobel, Arthur C. Klein, "Bee Venom," *Arthritis: What Works*, St. Martin's Press, 175 Fifth Avenue, New York, NY 10010, 1989; Also see *Alternative Medicine Digest*, Future Medicine Publishing, Inc., 5009 Pacific Highway East, Suite 6, Fife, WA 98424.

21. Personal communication from Ross A. Hauser, M.D.

22. Case reports furnished by Stephen Center, M.D.