

Dixie Zone Newsletter

Winter 2012

FROM THE NEW ZONE CHAIR

JERRY CLARK

The USMS board of directors has for several years been wrestling with a good way to collect standardized information from all the LMSCs in the country. A policy document named LMSC Minimum Standards was created 3-4 years ago to cite some standards that all LMSCs should try to meet. Last year, a survey was taken for the LMSC Development Committee, and from what I heard at our 2011 convention, the responses ranged from good to bad. Some of the questions may have been confusing too. Since then, the LMSC Development Committee has continued to discuss this matter and the idea of a new survey, prepared by someone who swims and is also a professional in the field of creating surveys, is evolving. Furthermore, the USMS board has added all the Zone Chairpersons to that committee, so I'm now included on conference calls when this committee has teleconference meetings. A lot of good people trying to do what is best, is how I see it so far. One way or another, the bottom line for the LMSCs in the Dixie Zone is that some of us may be asked to provide more data to the national office in Sarasota each year. How to best approach LMSCs about this is being discussed now; I will push for not being heavy handed, emphasizing why the additional data is needed and help figure out how it can be gotten without burning midnight candles. My guess is that the parties involved – presumably the LMSC Chairperson, Treasurer and Registrar plus maybe 2-3 members of the LMCS Development Committee – will most likely set up a date and time for a conference call to go over what can be done to increase the timely flow and quality of information to the national office. I think it would help if the committee sends info to the LMSC chairperson in advance of a teleconference so he/she could distribute it to the other officers. We'll see how this evolves in the coming months.

There are seven LMSCs in the Dixie Zone and I have a list of the officers in each one. If it turns out that some of us need to improve our reporting, I plan to be part of the solution group when that is being discussed.

Meanwhile, I hope our zone has a good turnout at the USMS Short Course National meet in Greensboro, NC in April. This year's convention will also be there in September. I'm sure their Convention and Visitors people are happy about both events being there.

DIXIE ZONE LCM CHAMPIONSHIPS

South Carolina LMSC Long Course Championships
August 4-5, 2012
Greenville, South Carolina

Meet Location: Westside Park & Aquatic Complex is a semi-open air facility with a 50 meter by 25 yards competition pool and adjacent five (5) lane warm-up/warm-down pool. Both pools are bottom striped, wall targeted and equipped with non-turbulent lane lines. Bleacher seating is available for up to 1000 spectators along with ample deck space and bleacher seating for swimmers. The water depth of the competition pool is six (6) feet to seven (7) feet measured from one (1) meter to five (5) meters at the starting end of the course and six (6) feet to seven (7) feet measured from one (1) meter to five (5) meters at the turning end of the course. Both the competition and the warm down pools have UV filter systems and new evacuator systems for chloramines discharge along with a high velocity air system.

Time of the Meet:

Saturday: Warm-up 10 AM, Competition at 10:30 AM
Sunday: Warm-up 8 AM, Competition at 9:00 AM

Awards:

Individual event ribbons 1st-8th place in each age group
High Point top male and female swimmers in each age group
Top three teams in and out of state

Highlights:

The 1500 m Free - First event Saturday morning.
Swim Meet T-Shirt: Pre-order only, Name of each participant will be listed on the back.
Saturday Night Social - Food, music, and beverages -
Downtown Greenville

Questions: Contact Karen Alexander, Meet Director at 864-506-2016 or pixabugg@bellsouth.net
Please visit our website at www.tgswim.com.

2012 USMS SPRING NATIONALS

The 2012 Spring Nationals will be hosted within the Dixie Zone at Greensboro, NC on April 26-29, 2012. We hope to see a great turnout from our Zone at the meet. The Greensboro Aquatic Center is the country's

newest major aquatic complex. Information on hotels and qualifying times is available on the USMS website.

CHECK-OFF CHALLENGE and 5/10K POSTAL SWIMS

Hammerhead Aquatics, part of GOLD Masters, is hosting the 2012 USMS Check-off Challenge and the 5/10k Postal Swims this year.

The Check-off Challenge is where one registers, and tries to swim each event on the books. It is a great team event. You can do the events at workout or a meet. You register, online and try to complete each event in yards, long course meters, or short course meters during the calendar year. Sign up and try. It does not matter what the times are. Challenge your teammates to do every event!

The 5/10k Postal Swim starts May 1 and runs through September 1, 2012. You register online, swim the distance at any pool of legal length, record your splits and send them in. Awards are given for relays and individuals and awards are for the top 10 in each age group. There is no harm in trying, so sign up! This event is awarded with USMS National championship awards.

You can register for one or the other at www.hammerheadaquatics.com or www.dixiezone.org. For more information, contact coach John at swimjohnswim@bellsouth.net

Support the USMS fitness events, and Hammerhead Aquatics, by signing up for one or both!

THE V UANA PAN AMERICAN MASTERS CHAMPIONSHIPS

The Sarasota Family YMCA will partner with U.S. Masters Swimming to host the 2013 Pan American Masters Championship, which will be held May 31-June 10, 2013.

The event schedule is: Synchro: May 31, 2013 through June 2, 2013; Swimming: June 5-9, 2013
Open Water: June 10, 2013

The event will be held at the Selby Aquatic Center, Sarasota Family YMCA, 8301 Potter Park Dr, Sarasota, FL 34238. Full details will be available at this site soon: www.panamericanmasters2013.org

NOTES FROM THE FLORIDA LMSC

Florida Maverick Master (FMM) swimmer Gregory Rotole has set an extremely challenging and

interesting goal for September 2012. What is it? Answer—to swim ONE MILE of each swimming stroke, (butterfly, back, breast, free) underneath the Golden Gate Bridge in San Francisco, CA.

Greg will undoubtedly be the fittest Masters swimmer before he even attempts the event. Besides the physical vigorous swimming training, the psychological aspects are of equal challenges. Dealing with oncoming ships, jellyfish, sharks and the shivering 60 degree water temperature; the entire swim must be completed in 2.5 hours due to the currents.

Florida LMSC wishes Greg all the luck with his journey. One knows he will have completed a major goal with just the required preparation. We look forward to hearing the exciting details when Greg returns to Florida in September.

NEWS FROM BEAUFORT, SC

PETE PALMER

The Beaufort Masters Swim Team (BMST) lost its creator and Coach, Dick Fetters, to time. After 24 years of devoted leadership (creating a 40 person team in a town with a population of 12,000), he was physically compelled to quit coaching in the summer of 2011.

We got massively lucky! 1996 US Olympian, Carlton Bruner, became our Coach. It's no surprise that his workouts reflect Coach Bruner's extensive knowledge and his readily absorbable teaching style is, dare I say it, a blessing. And, rather than shrinking in the aftermath of losing the only coach we had ever known, BMST is growing to the point where lane space is becoming an issue.

With reference to the USMS Swimming Saves Lives Program, Coach Bruner has, for four years, led BMST in its sponsorship of and support to the "Beaufort River Swim" - which funds the local YMCA's learn-to-swim-program. And, incidentally, the Y's swim program has grown like Topsey both with new-to-the-water swimmers and the children of present and former BMST members. On 17 December, BMST members were the timers for a YMCA age group meet - helping to forge the idea that swimming not only saves lives but is for life!

WHEN TENDONS GET DAMAGED

Edward H. Nessel, R.Ph, MS, MPH, PharmD

OVERVIEW

Tendons; Afforded enough importance to have special mention in Greek mythology. The warrior, Achilles, was dipped in the river Styx by his mother, Thetis, to render his body invulnerable to future harm. Every inch was coated except where he was held by his ankle covering

the tendon area named for him. This relatively small area would prove his fatal weakness. Are tendons, then, important enough to be concerned about their health when we ask the body to withstand rigorous training and competitions? Yes. And what if they do sustain definite injury, is it something to take seriously? Yes. Should we push past their telling us something is amiss with increasing pain and weakness when they are brought into play? No.

This topic falls within my “keeping-the-athlete-healthy” research and is something everyone associated with athletics needs to understand and respect. Too many people, even the health and coaching professionals whose areas of expertise include how the body reacts to vigorous training, have utilized the wrong term more often than not in describing the painful and weakening condition when damage occurs to the all-important tendons attached to vital muscles for movement in chosen sports. To immediately clarify: tendons attach muscle to bone; ligaments attach bone to bone.

Due to their important function regarding the body's ability to move with force by attaching to less dense muscle as opposed to heavier, thicker bone, tendons have more elasticity than ligaments; they need it due to the inherent contraction (concentric) and extension (eccentric) of muscle movement. And they are not built as thick and strong as ligaments which usually allows them to suffer more injury due to irritative or incorrect repetitive activity as opposed to acute traumatic injury for ligaments. To keep tendons in a healthy state and prevent the cascade of overuse into injury are vital responsibilities of both the athlete and the director of training. Keep in mind the fact that just about every disease condition in the human body is caused by some type of initial inflammation. If it is not treated appropriately and thoroughly with a quick resolve, the initial diseased inflammatory response can progress to several possibilities, all leading to inevitable entrenched tissue damage over time. This almost always leaves its repeated “calling card” of tissue destruction which lessens the ability to optimally generate force.

The first word that usually comes to mind as a simple and rapid “diagnosis” either from the suffering athlete or the care-giver examining same is “tendinitis” especially when pain increases with specific repetitive movement, and an increasing sense of weakness emerges. The suffix “-itis” medically implies that an inflammatory condition has developed. This may be the correct initial call, but more often than not, the condition that continually presents itself morphs away from true inflammation, per se. The major cause of lingering tendon pain has been found to be a failed healing response with tendon tissue degeneration. The inflammatory response should not be considered a stagnant or slow-moving condition. It is a serious warning which the body is broadcasting that the quality of the affected tissue has been compromised and

diminished to varying degrees and can not hold up its task of adequately handling sufficient force for continuous vigorous exercise. The major cause of lingering tendon pain has been found to be a failed healing response with tendon tissue degeneration. Ideally, as mentioned above, the patient's condition must not be treated casually, but rather thoroughly and vigorously to prevent what medical specialists now label this connective tissue damage as tendonopathy and tendinosis.

Chronic tendon injuries are most often a result of repetitive exposure to excess mechanical load or incorrect movement. Eventually, the damaged tendon tissue becomes weakened and unable to adequately respond to this load. While almost any tendon can become overburdened, the most common and important ones in sports are:

- a. “swimmer's shoulder” where the possible involvements are tendons of the four rotator cuff muscles and the biceps brachii;
- b. “tennis elbow” involving tendons located at the outside (distal) aspect of this joint and “breaststroke” or “suitcase” elbow settling at the inside (medial) aspect...all allowing movement as common wrist extensors;
- c. forearm where the tendons allow for flexing and extension;
- d. wrist and fingers supported by the abductor (away from) pollicis longus tendon and long finger flexors;
- e. “jumper's knee and “breaststroke knee” involving the patella (kneecap) and quadriceps (largest single muscle mass in the body) tendons;
- f. lower leg extension and flexion affected by the Achilles tendon;
- g. foot and ankle movement involving the Tibialis posterior.

Both intrinsic (from within) and extrinsic (from outside the body) factors contribute to the development of tendinopathy. Intrinsic factors predisposing an athlete to these tendon issues include an inherent “crowding” of the joint space where the internal elements of a joint are constantly forced to rub against one another with demanded range-of-motion; increased age with concomitant loss of flexibility; and male gender. As inevitable aging ensues, tendons become stiffer and less capable of handling high loads, and tendon injuries can occur with only moderate exertion. Estrogen may play a protective role, as females have a lower incidence of tendinopathy, and post-menopausal females taking hormone replacement therapy experience less tendon damage than those who do not.

Extrinsic factors that can hurt tendons include the training error of allowing incorrect repetitive movements through various joints, inappropriate use of equipment (e.g. swim paddles that place constant excessive forces throughout the shoulder, improper

footwear for distance running), and the simple but, oh, so very important premise of not allowing the athlete adequate rest and recovery throughout the training cycle.

Pathology and Presentation

There are many ways to describe the pathology of an injured tendon. The most recent model utilized by orthopedic specialists suggests that there is a continuum of tendon pathology progressing through three stages: from the asymptomatic tendon to the tender-to-the-touch tendon to the degeneration-of-tissue tendon.

The first stage of injury and overuse is called the reactive phase which is a short-term adaptation of an acutely overloaded tendon. No inflammation is seen yet but a thickening of the tendon develops. No overt symptoms are presented yet, even with misuse, but the smart play would entail appropriate rest and recovery from intense and prolonged use. A correct stretching protocol would also be indicated here. Remember, even with no symptoms, damage can be working to undermine the tissue integrity of the tendons.

The second stage of injury comes into play if the overload on the reactive tendons is not reduced sufficiently, the tendon(s) may progress to a state of disrepair. Tendon disrepair, or failed healing, is characterized by an increase in a disorganized breakdown of the functioning tissue matrix. Pain becomes constantly noticeable with movement and palpation. Weakness increases even with the will to try and hold movement to a quality level.

As the tendon disorder progresses, what develops is the third or degenerative stage. Here, the functioning tissue matrix becomes more disordered with areas of cell death and loss of quality tissue. Tendons in this last stage of the continuum are past the point of spontaneous healing and are much more likely to rupture with continued demand for force. It is virtually impossible to continue on with vigorous training and competition if the condition has been left to progress to this state.

Since tendinopathy is often a clinical diagnosis, proper treatment requires a thorough history of training routines, movements, and intentional increases in exercise demands. In the weight room, as examples, with swimmers the motion of a bench press with serious weight resistance can have the shoulder elements press against each other causing the rotator-cuff tendons to rub against bone and cartilage producing damaging impingement. The land-based athlete who wants to develop his legs and build strong quadriceps for speed and power must be careful to use an easy angle of lifting when doing leg extensions so as not to put excessive pressure on and damage the patellar (knee cap) tendon. When running over distance and non-level paths, having to deal with

gravity and the hardness of the roadway, over three times gross body weight can be brought down with each stride onto each articular joint (knees, hips, ankles). This can cause the ITB (Ilio-tibial band), Achilles, and all the other tendons attached to the driving musculature to become overstressed, inflamed, and begin degeneration. If there is question as to absolute diagnosis and extent of damage, the use of sophisticated diagnostic procedures (ultrasound, MRI imaging) may be beneficial in confirming the existence and extent of tendinopathy, identifying any macroscopic tears and determining the extent of involvement of surrounding structures. Obviously, once an affirmative diagnosis has been made, treatment should be quickly instituted and any modifiable extrinsic factors should be corrected. Unless absolutely pointing to the need for surgery, utilizing more conservative management should be the first path to rehabilitation.

Appropriate Conservative Management

Staying out of the OR should be the hands-down first approach. Although conservative treatment regimens may be unsuccessful in a sizable portion of patients (up to 45%), it is accepted medical protocol to have them attempt diligent physical therapy for up to six months along with other conservative approaches prior to surgical intervention. Of course, if we are dealing with professional or aggressive elite athletes, getting them back into competition status becomes the most pressing issue. Having them wait several months to see if health and functionality can be restored in these cases is usually not the approach that will be tolerated. Both non-pharmacological and pharmacological protocols will be listed and discussed below.

Non-pharmacological Protocols

Rest: It is NOT recommended to force absolute rest and immobilization in chronic tendinopathy. Some tendon loading is necessary for collagen repair and tendon remodeling. RELATIVE REST, which allows for maintenance of activities with reduced intensity and mechanical load, is the preferred approach. Activity that elicits pain from the tendon and the original activity that caused the injury should be absolutely avoided during the acute phase of recovery.

Cryotherapy: Application of ice or sustained cold to an acute injury is a common practice. The cold provides an analgesic effect with the additional benefit of reduced metabolic rate and blood flow in the tendon, leading to decreased influx of cells that are caused to circulate and bring about an inflammatory response and acute swelling. Though the benefits of applied cold to a chronic condition is less pronounced, it has been common practice over the years where we see many times a hard-throwing baseball pitcher (e.g. L.A. Dodger's Sandy Kolfax) or football quarterback (Oakland's Kenny Stabler) undergoing an elaborate ice-packing wrap after the game which seemed to have taken down the swelling and lessened the perceived

inflammation for a quicker healing response.

Exercise and Stretches: When discussing movement with regard to muscle and attendant components during rehab of injured tendons, it is important to first differentiate between the two most common exercise regimens: ECCENTRIC and CONCENTRIC. The former utilizes active lengthening of the muscle/tendon unit. Alternatively, the latter involves application of a load to shorten the muscle/tendon unit. During vigorous exercise it is the eccentric (lengthening) movement of the muscle under stress that causes problems like delayed onset of muscle soreness (DOMS) due to micro tears with attendant bleeding and swelling pressing against nerves. But to better help heal damaged tendon tissue, lengthening eccentric exercises under mild force appear to positively alter the structural and mechanical properties of the tendon proper. Increased collagen cross-linking and tendon remodeling through regeneration of healthy tissue is superior to tendon scarring which is the more common outcome with concentric exercises.

Several trials with eccentric exercise and modalities have shown definite positive results. Several tissue types, when damaged, tend to shrink and close in as the healing process ensues. This is Nature's protective mechanism to try and prevent excessive use in the subsequent stages of healing after-the-fact. But with elements of the body that work to produce range of motion, this is counter-productive...absolutely not what we want.

The idea of instituting a pre-stretching protocol to increase the actual length of the damaged tendon is good. Stretched tissue will lessen the strain on the tendon proper during subsequent elongation movement; this will allow for better adaptation toward desired tissue healing. Then progressively increasing the load with contractive force applied against the tendon will result in increased integrity of tissue and, thus, strength. Finally, causing the tendon to contract with increasing speed leads to the development of greater force...everything we need to try and get back to where we were pre-injury.

The exact protocol to elicit the best results is still being perfected but positive outcomes will only occur when patients become highly motivated and adhere to the rigorous regimen which entails, for a good-working protocol, twice-daily repetitions of exercises, seven days per week for as long as 12 weeks. Also, the fact that definite discomfort into pain will most likely develop with this type of physical rehabilitation is not an absolute contraindication. Unless totally debilitating, the patient should emotionally incorporate the discomfort as simply part of the healing process. But as with instituting any extended protocol, consulting with and getting medical approval from any and all of the pertinent medical team is strongly suggested. Some patients bring other medical issues to the table

and might need modification so as not to do the patient more harm than good. Most cases also require pharmacological (medication) treatment to lessen the discomfort and enhance the healing procedures.

Pharmacological Protocols

For the past several decades, the most common choice of medication to treat what was thought to be simple inflammation was from the class of medications called *NSAIDS* (non-steroidal anti-inflammatory drugs). These are prostaglandin-inhibitors which innately reduce inflammation by lessening the effects of prostaglandins, powerful substances which are brought into play in the inflammatory process. But as physiology would have it, prostaglandins are also needed to ensure adequate perfusion of blood into organs and the regeneration of various tissues to continuously heal and repair stressed areas of the body. The first of this class of drugs, the prototype, was simple aspirin (acetyl salicylic acid, ASA) discovered in Germany by Frederick Bayer in 1899. For decades, scientists had no definitive idea how this "miracle" drug worked at the cellular level. But once elucidated, several derivatives were quickly manufactured by the big pharmaceutical houses. As their classification implies, they provide mild to moderate anti-inflammatory activity and were used for such thinking that in most cases inflammation was the root cause. Maybe early on in the diseased state but, as outlined above, not chronically. When the inflammatory response is no longer the presentation, these medications can actually do the patient more harm than good.

As eluded to above, because of its inhibiting effect on prostaglandins, it has been shown at the cellular level that NSAIDS can actually delay the healing process, make the target tissue weaker over time and negatively affect several other organ tissues. Though this class of drugs can provide mild to moderate analgesia, controlling most pain associated with this type of injury, historic medical investigation has shown that since their wide-spread use for all types of aches and pains dating from the 1970's, NSAIDS have become the number one cause of kidney failure, a major cause of gastrointestinal irritation into frank ulcer formation, and potentially serious cardiac distress in the American populace. If the patient finds the analgesia produced by this class of medication adequate and can tolerate the proper dosages without having to endure the potential untoward effects, the emotional burden of not having to endure constant pain is worth the short-term exposure. A recommended dosage protocol is an adequate daily dosage according to labeled directions per drug for up to five days with a two-day "drug holiday" to clear the body and allow all organs to function properly with adequate blood supply and tissue regeneration. If progress in pain relief and ability to move with gaining strength and range-of-motion is present but not at a totally-healed level, a repeat of the dosage protocol can most times be tried. A more

serious class of medication entails the use of very powerful anti-inflammatories called corticosteroids.

Corticosteroids

True steroid anti-inflammatory medications are usually reached for when the attending physician feels more “heroic” treatment is needed to quickly reduce what is thought to be the inflammatory process, even though this is usually not the major pathological feature. These drugs are injected *in situ* (right into the sight of pain and weakness whether it be soft tissue or an actual joint). Most evidence supporting the use of steroids is anecdotal, and the limited clinical evidence suggests that local corticosteroid injections have varying effects at different tendon locations. For rotator cuff tendinopathy or tennis elbow, short-term pain relief and range-of-motion benefits have been reported but no long-term benefit has been repeatedly and consistently shown. As for Achilles tendinosis, there has been no clear benefit proven, and numerous reports of tendon failure (rupture) have been sustained when the patient reverted too quickly back to intense training. Below is a small listing of available corticosteroid preparations for joint and soft tissue injection.

Generic Name	concentration	Dose
Duration of Action		
<i>Hydrocortisone acetate</i>	25mg/ml	5-50 mg
36 hours		
<i>Methylprednisone acetate</i>	40 mg/ml	4-80 mg
weeks to months		
<i>Prednisolone acetate</i>	25mg/ml	5-25mg
weeks to months		
<i>Dexamethasone phosphate</i>	4mg/ml	0.4-6mg
weeks to months		
<i>Triamcinolone acetonide</i>	10 mg/ml	2.5-15mg
	40mg/ml	5-40mg
weeks to months		
<i>Triamcinolone hexacetonide</i>	20mg/ml	2-30 mg
weeks to months		

For tendon lesions most experts recommend soluble, shorter-acting *hydrocortisone* preparations to decrease the long-term negative effects on protein synthesis and connective tissue metabolism. These types of medications usually produce intense localized pain upon administration and are usually combined with local anesthetics which, unfortunately, more often than not don't seem to provide the desired obtundent effect.

Glyceryl Trinitrate (Nitroglycerin)

“Nitro” is mainly associated with treating cardiac conditions by relaxing vascular musculature to open up circulation to a damaged heart to reduce chest pain (angina) in either quick-dissolving tablets taken sublingually (under the tongue) or by ointment application right on the skin over the heart. But in this medical situation, studies have shown that nitric oxide (NO) is produced when nitroglycerin is metabolized, and NO enhances tendon healing by causing more collagen synthesis to occur from specific tissue

(fibroblasts); more collagen = stronger, quicker-healing tendons.

Several studies and analyses have shown repeated positive effects in reducing pain associated with performing activities of daily living in people taking this medication with chronic tendinopathies. When used in conjunction with the elongation exercises mentioned above, positive pain relief has been long lasting and seen in a majority of cases. The most improved tendinopathy was with the Achilles. Patches of glycerol trinitrate are applied directly to the tendon area in doses of 1.25 mg to 5 mg per day. Patches are changed daily, and as seen whenever this drug is administered, varying degrees of headache are always a trade-off.

Sclerosing Injections

The chronic condition of tendinopathy is associated with areas of increased vascularity. An excessive amount of vascular infiltration to the affected sight is seen to occur at the damaged areas of the tendon which, despite what might be thought, does NOT aid in tendon repair. On the contrary, it has been the major cause of pain at the sight. Injections of sclerosing chemicals act to strip away excess vascularity or to produce a thrombus (clot) in the formed vessels to prevent them from allowing excessive blood to go to the affected tendon tissue. The most pronounced successes have been with the Achilles and patellar (knee cap) tendons. Very few side effects have been noted with this treatment protocol, and patient-return to a modified training regimen have been as soon as one to three days.

Surgical Intervention

Patients suffering persistent symptoms after about six months of conservative therapy are considered candidates for surgical correction. Though procedures are dependent upon the surgeon's training and experience, there are two main approaches to the problem. The most invasive and intense has the total removal of the affected tissue with replacement of healthy tendon tissue from other areas of the body. Recovery with rehab takes dedication and patience. This is better known as the Tommy John procedure for the professional baseball pitcher who was the initial highly successful recipient. The other protocol is less severe and requires less recovery time and effort and revolves around “scraping” away as much affected tissue as is possible while still maintaining sufficient tendon for regrowth and a return to appropriate activity.

Take Home Points

Tendinopathy, or tendinosis, results from chronic tendon injuries. Not being able to tolerate repeated exposure to mechanical stress is a sure path to this condition. The initial tissue involvement can present as an inflammatory response which sometimes forms even before symptoms arise. If the training and/or competition regimens continually over-stress the ability

of the tendons to handle demanded vigorous movement, chronicity of condition moves the tissue into a state of tendinosis or tendinopathy which is more difficult to treat. Initial treatment can, and often does, include the NSAID class of drugs but only for a week or two since the benefit-to-risk ratio heads in the wrong direction, and most of the time inflammation moves into another plateau of tissue disease that presents differently. With many of the NSAID class of drugs available over-the-counter allowing the patient to self-medicate, if they don't take advantage of appropriate medical consult, either from a physician or pharmacist or knowledgeable trainer, they could unwittingly risk over-exposure to serious medications.

It is now considered a better path to healing to include an eccentric (lengthening) exercise program, initial cryotherapy (cold applications) then applied heat if it feels better, and, of course, adequate and appropriate rest. Other conservative pharmacological treatments

include topical glycerol trinitrate and sclerosing agents which have shown promise in several studies.

Though they are readily available, corticosteroid injections should not be utilized as often as they are as primary treatment because of their physiological tendency to actually slow healing, weakening the tissue structure, and giving a false sense of recovery by lessening the pain at site. Too often these very potent tissue modifiers are administered to get the athlete back onto the training and competition regimens, which in the professional and/or elite level of sports means the athlete becomes secondary to his activity rather than the necessary other way around. This should never be the case with casual or budding athletes. It is always in their best interest, long term, to administer appropriate care rather than supposed expediency and do no harm.

DIXIE ZONE CALENDAR

Feb. 4-5	SCY	Upper Keys Invitational – Islamorada, FL
Feb. 10-12	SCY	North Myrtle Beach, SC
Feb. 11-12	SCY	Auburn Masters Invitational – Auburn, AL
Feb. 11-12	SCY	Valentine’s Meet – Clearwater, FL
Mar. 3-4	SCY	Masters Challenge – Ft. Lauderdale, FL
Mar. 3	SCY	Frank Clark Masters Open – Greensboro, NC
Mar. 3	SCY	Central Florida Marlins Winter Splash – Ocala, FL
Mar. 10	SCY	Greenville Splash Relay Meet – Duncan, SC
Mar. 16-18	SCY	Dixie Zone SCY Championships – Baton Rouge, LA
Mar. 17-18	SCY	Savannah, GA
Mar. 23-25	SCY	St Pete Masters SCY Championships – St. Petersburg, FL
Apr. 7-8	SCY	Hammerheads Invite – Ft. Lauderdale, FL
Apr. 12-15	SCY	YMCA Masters Nationals – Ft. Lauderdale, FL
Apr. 21	OW	Tampa Bay Marathon Swim (24 miles) – Tampa, FL
Apr. 21	OW	Nike Swim Miami (800m, mile, 4K, 10K) – Miami, FL
Apr. 26-29	SCY	USMS Short Course Nationals – Greensboro, NC
Apr. 28-29	OW	Open Water Festival – Fort Myers, FL
May 5	OW	Hurricane Man – St. Petersburg, FL
May 5-6	SCY	Tiger Master Meet – Clemson, SC
May 12	OW	Hurricane Man (1K, 2.4 Mi) – St. Petersburg, FL
May 13	LCM	Southwest Florida Spring Splash Pentathlon – Naples, FL
May 20	LCM	Central Florida Marlins Summer Splash 1 – Ocala, FL
May 26	OW	Ed Gaw Amelia Island Open Water Challenge – Fernandina Beach
June 2	LCM	Classic City Masters Meet – Athens, GA
June 8-10	LCM	Bumpy Jones, Classic – Sarasota, FL
June 16	OW	Swim Around Key West (12.5 miles) – Key West, FL
July 5-8	LCM	USMS Long Course Nationals – Omaha, NE
July 14	LCM	Central Florida Marlins Summer Splash 2 – Ocala, FL
July 14-15	LCM	St. Pete Masters LCM Championships – St. Petersburg, FL
July 14-15	LCM	Upper Keys LCM Invitational – Islamorada, FL
July 28-29	LCM	June Krauser Summer Splash – Ft. Lauderdale, FL
Aug 4-5	LCM	Dixie Zone LCM Championships – Greenville, SC
Aug. 11-12	LCM	City of Clearwater LCM Meet – Clearwater, FL
Aug. 25	OW	USMS 1-Mile Open Water Championship – Lake Lure, NC
Sept. 29	OW	Dixie Zone OW Championships – (1K, 2.5K, 5K) Sarasota, FL
Oct. 12-14	SCM	Dixie Zone SCM Championships – Orlando, FL

For more calendar details, check out www.usms.org and www.dixiezone.org.
It is recommended that meet directors post their meet information on the main USMS Calendar as well as on the Dixie Zone Calendar.

Zone Website: www.dixiezone.org	Zone Chair: Jerry Clark jerryclark@bellsouth.net	Newsletter Editor: Barb Protzman swimbarb@hotmail.com	USMS Website: www.usms.org
--	---	--	--