

## AVOID THE AGONY OF BECOMING A WEEKEND WARRIOR

*By: Mary Lynn Scovazzo, MD*

Remaining physically active in the middle adult years is a challenge for baby-boomers (currently ages 40-60) who now comprise 28% of the US population. Often, the focus on jobs and family leaves limited time for personal agendas such as proper diet and exercise routines. The term “weekend warrior” labels as exercise pattern of vigorous sports participation on Saturday or Sunday in the face of no exercise at all during the usual work week. As we often see in the orthopedic clinic, the result of this infrequent and often intense form of exercise may be a: ruptured Achilles tendon, hamstring rupture, or shoulder tendon tear. This article will focus on two approaches to reducing the risks of injury from this type of sports participation in the middle adult years.

The first approach requires us to examine the pitfalls of how the aging athlete engages in the “weekend” activity. Most at risk in the athlete who participates in a ballistic sport with sudden, quick sprinting and jumping, such as basketball, softball or racquet ball league play for example. Males seem to be at greater risk than females. These leagues often combine younger athletes in their late teens or 20’s, who generally have greater speed and endurance, with the middle age athlete. The higher level of play may encourage the baby boomer participant to push harder than they should. Lack of flexibility and fatigue may predispose the athlete to injury. Let’s explore how these factors effect the aging athlete.

Loss of flexibility is often viewed as a natural consequence of aging. To begin with, we all have different degrees of flexibility of our joints related genetically to the amount of “elastin” (1-2%) mixed with “collagen” (98-99%) in our tendons and ligaments. An analogy to this are fabrics such as stretch jeans with 2% lycra or spandex added to 98% cotton. Adding different amounts of lycra or spandex will affect the stretch ability of the garment. Tendons connect muscles to bones and span across our joints. We start out life with a set amount of flexibility or lack thereof. One consequence of aging is that the repair process is less efficient and the little insults and injuries over the years and decades of use, have healed with tiny scars. The orthopedic literature often refers to this as “repetitive micro trauma”. The scarring within the tendon leaves the tendon functional (it still attaches the muscle to the bone) but less elastic and stretchable. The tendon also now often must cope with the person’s added weight and slower reaction times and loss of coordination that also comes with aging. The result? A sudden very obvious event – a “macro trauma”. This comes in the form of a ruptured Achilles tendon (ankle) or a quadriceps or patellar (knee) tendon. A ruptured hamstring (thigh) or gastrocnemius (calf) muscle may occur at the muscle/tendon junction. A macro trauma often occurs early in game play. The baby-boomer athlete may arrive late and is anxious to play and runs out on to the court without warming up. The description the athlete gives to the event is often “I felt a sharp pain in my calf/Achilles, like someone threw the ball and hit me directly”. They often turn around to look and are surprised to see that no ball has struck them! Younger athletes may often get away without warming up before sprinting down the court. The aging athlete may not.

A micro trauma may also occur towards the end of play. Fatigue of out of shape muscles and decreased endurance macro leads to sloppy and off-balance play. The increased weight the older individual carries increases the demand on the muscle and tendons and ruptures may occur. Many ski injuries occur at the “last run of the day”. Ski lift ticket passes are pricey and skiers may want to stay on the mountain to get the most from the ticket, but the occasional skier is often fatigued by midday and taking “just one more run” is often the run where a fall occurs, leading to a knee injury. Knowing your limits and heeding signs of fatigue by going into the lodge to rest will pay off with a fun day of skiing that is injury free. Learn to not feel a bit guilty of “wasting the lift ticket” at 1:00 when your legs tell you that

you've had enough. Go into the lodge, hydrate, and relax those sore muscles in front of the fire. This way fitness can be combined with fun and relaxation. The goal should not be to compete to see who can take the most runs or stay out skiing the longest time. Try to take the often-competitive achieving workplace attitude out of the recreational activity, such as skiing. Therefore, the first approach to the challenge of reducing the risks of being a weekend warrior would be how the actual "game day" is addressed. First, arrive on time, or better yet, EARLY! Stretch for five to ten minutes to get the tendons to remember their ability to elongate (stretch) on a GRADUAL basis. (Simple stretching and exercises can be found at [www.aaos.org](http://www.aaos.org) select patient/public information, and then select sports/exercise to find what you are looking for.) Then, walk fast or jog lightly for another five minutes to "warm up" the muscles. This will ask the muscles to prepare for the more vigorous pace of game play. During play, if you feel fatigued, be ready to remove yourself from the game, at least for a rest. Don't let younger players or your own pride shame you into continuing to play when you know you need to stop! If this is a recurrent issue, find a league with older athletes that have less competitive attitudes.

The second approach to reducing the risk of injury of a "weekend warrior" is to begin a simple routine of stretching/strengthening during the work week. This need not be done at a gym or health club, but may be done in the family room or in front of the T.V. Stretches and strengthening exercises may be sports specific using therabands or light dumbbells. Core body exercises including crunches for abdominal muscles may be done easily on the carpet or on a mat. Tie the routine into a favorite T.V. program. You may find other family members, such as your kids, joining in with you. Now the high-achieving baby-boomer can feel proud that they are "multi-tasking" by combining "family time" with their own personal goal to improve their fitness with an exercise routine.

To elevate the heart rate for aerobic conditioning, use the bottom step as a "stepper machine", use a jump rope, or go outside for a brisk 20 minute walk. The next time your family wants to buy you a gift, request a stationary bike or other form of cardio-equipment. This can be used indoors during the time of year where it is easy to make an excuse to not go outside to walk or jog or ride your bike. Find a way to improve your aerobic endurance without relying on a drive to the gym.

By doing a stretching and strengthening routine two or three nights a week, you will maintain tendon length and flexibility and improve muscle strength. Having some endurance from aerobic conditioning will help fight the fatigue that will come with vigorous weekend sports participation. The goal is to remain injury free and avoid nagging injuries or a macro trauma event that will bring you to the emergency room or the orthopedic clinic. Now that you have fit in exercise during your work week you are no longer a true "weekend warrior"! You have become an athlete who may engage in sports successfully without interruption by injury for decades to come.