

## **Piramidal Syndrome, Tibial Stress Syndrome and Achilles Tendinopathy from the perspective of a coach.**

For obvious reasons, many of the injuries related to distance runners are located in its lower extremities, from the hip to the feet; tendinitis, stress fractures, pain in the knees, tears, periosteum inflammation, inflammations in the pyramidal muscle and many others. During my time as a runner and coach, there were so many times that I suffered in my own flesh the pain caused by those injures, or heard from my pupils or from other runners how some of those injuries have affected their career, Is for that reason that I consider necessary to talk about three of those injures from my perspective as a coach. To the final I hope this article is beneficial.

If I do a review of how during those 19 year as a runner were the evil injuries affected me can it give account that the frequency and severity of them were located in two specific moments, the first, during my first three years trying to become a runner, in which I think without mercy they made my life in squares and, and little by little I was overcoming them. However I am convinced that everything was due to a painful path of adaptation of a small body of 47 kilograms to the demands of training of high performance runners. Luckily, it surpasses them.

The second time in my athletic life where injuries took my legs as a source of rehearsal was in the year 1985, by coincidence the year in which I had to go to university in Colorado (USA) and as a result of being training before I went to Colorado with two or three years with an excessive number of kilometers for a 5,000 meter runner (up to 275 km week) adaptation to a new place and temperatures that in some opportunities could approach 40 degrees below zero made three of these injuries come together in a short space of time: Achilles Tendinopathy, Pyramidal Syndrome and Tibial Stress Syndrome (the three Marías). Recently, after our athletic fitness class one of my runners approached me and mentioned me about a pain that he had never felt before and that for a few days I was bothering him, he pointed to the place where he felt the discomfort, immediately I said to him, Tibial Syndrome stress! my pupil looked at me like asking what it is?

Secondly, in the same day a young female runner wrote to me requesting advice about a pain she was feeling in the middle part of her buttock and that sometimes stretched out towards her back and her thigh... in the same way I told her, Inflammation of the piriformis, in others words Pyramidal Syndrome, I recommend her see a specialist, keep rest and stretch it. That is why without to have the knowledge that a physiatrist, a physiotherapist or any specialist in the field may have I wanted to write these lines about the before mentioned affections since in one way or another they were those that caused the most headache. First of all I will refer to the Tibial Syndrome Stress.

Although at the beginning of my life as a runner that injury affected me greatly, even to the point that to alleviate my pain and to train I self-banded my tibia and fibula zone because at least for a few moments I did not feel such a strong pain, and at other times the pain was so strong that my brain ordered faint and there were many opportunities in which I suffered a syncope. Little by little I became more resistant and my adaptation to training more wide that for a few years I did not know about that condition, but until the beginning of the year 85.

Tibial Stress Syndrome, as its name suggests, is the inflammation of a thin membrane that covers the tibia and fibula bones. Peri (around) osteo (bone) the periosteum is that little body white membrane that separates the muscle from the bone.

This injury, like other injuries, has its origin in many factors and not necessarily one only, Inadequate and very hard training over surfaces such as asphalt, paving, stones and concrete, very sharp increases in the volume and intensity runs, biomechanical deficiencies, bad footwear, lack of proper massage and maybe one of the main, bad physical and muscular adaptations to training, deficiencies in the hip and other exogenous factors.

How to heal it? well I remember that once I were in Lisbon (Portugal) was training together an elite group of runners of the selection of Portugal, among them was Pablo Guerra, European cross country champion and among the 10 best in the world in that specialty in the 1990s, Pablo used to put iodine before warm-up in the area of the tibia, when he asked reason, he told me "the Tibial Syndrome kills me"

As I do not know for sure how iodine improved its Tibial Stress Syndrome I will not recommend that.

Cold therapy after your training sessions, take a punch bowl where you can put the sore leg and keep it there for about 20 minutes, it's not a pleasant therapy but I can swear to you that it worked for me at some other time when my Tibial Stress Syndrome affected me strongly.

There are those wear compression stockings. In my time as a runner that pod was not known, But As I mentioned before, I bandaged, and in one way or another that bandage worked to me and largely avoided the vibrations in the affected area at the time of running.

Go to a specialist since it is possible that to make a better therapy you need to know how do you launched when you run and how is your middle zone strengthened, is it likely that your Tibial Stress Syndrome is due to an inadequate strengthening of your hip and as a result there are imbalances in your hip that affects the way you run. Review from time to time yours running shoes, they will give appropriate clues about the way how you step and what prevention to take in case there are footfall deficiencies. Often my runners ask me about what anti-inflammatory drugs to take. Personally, I do not like to take anti-inflammatory and I do not recommend its use unless it is a specialist who indicates them. To me anti-inflammatories may relieve me from the muscular pain, but their open a hole in my belly and another in my kidney. Together with your physical trainer, you should designs a systematic stretching and flexibility program that does not only help you heal faster from this injury, but also help you prevent his future appearances.

The second condition that made me have a lot of bad times, especially in that fateful year 85 is the called Pyramidal Syndrome. And what is the Pyramidal Syndrome? It is a pain that occurs at the gluteus level and radiates towards one of the legs and that looks more like a condition of the sciatic nerve, it is caused by the excessive use of the pyramidal muscle which is located inside the buttocks and that when inflamed it compresses the sciatic nerve.

Among the characteristics of these pains, a pain of hip or buttocks is observed after being sitting for a long time, when driving a vehicle, when climbing hills or stairs, standing, etc. It hurts every time. Sometimes there is a sudden or gradual pain that starts at the buttock and moves down the leg and we come to think that is the sciatic, although in a certain way it is like an irritation of it because the inflammation of the piriformis affects it, difficulty to walking or jogging.

As I said, the piriformis muscle is inside the hip, specifically in the buttock, very close to the sciatic nerve, it is not visible and due to the deficient strengthening and stretching it, and by excessive use and abuse it inflames and irritates the sciatic nerve. Hence its resemblance to a sciatic injury.

To relieve yourself of an inflammation of the piriformis it is advisable to stretch the piriformis muscle and avoid that it irritates the sciatic. A range of stretching exercises can be used: stretching the piriformis muscle, extensor muscles of the hip and hamstrings. Normally in our athletic fitness class on Saturdays the physical conditioning professionals that accompany me in that class resort to a series of exercises that prevent the emergence of so unpleasant injury.

Achilles' Tendinopathy.

It is an inflammation of the tendon located behind the ankle or its capsule. This tendon is perhaps the strongest of the human body, but also it is one of the most used, so its possible inflammation is due to overuse.

Among the causes of this tendinitis we could mention:

Important modifications of training habits, either in the intensity, duration or frequency of them.

By the beginning of autumn of 85 my volume of km per month exceeded the thousand kilometers, this coupled with the fact that I did not hydrate well to do those high volumes of kilometers and I did not tend to stretch after those very hard training without doubts had a very important role in the appearance of that injury that became chronic and made me company for several years of my sporting life.

The use of inappropriate shoes can also lead to inflammation of the Achilles tendon, pain usually occurs in the morning when you get up and start the race, but As the pain worsens it is almost permanent and even given its severity it can become sensitive to the touch and there you could talk about a chronic Achilles tendinosis.

It must be attacked from the moment of the appearance of pain in order to avoid situations that can lead to a ruptured Achilles tendon.

Personally I was fine when I put some paper in the back of the shoe that they made my heel rise a little and that gave me some relief when I walking however, It was not very useful at the training time since at the end of the session I had to use a cane to be able to walk

Running with floats in the swimming pool can be an alternative, and the application of massages to relieve the calves, and if it the injury is very advanced is necessary to produce a break in the fibers and to seek a more organized growth of these. That's a good option before undergoing surgery, but

that manipulation of the injury should be performed only by expert hands so if it is necessary find for that alternative, Nelson Plaza a good therapist and specialist will be my first option.

It is prudent to recommend the use of anti-inflammatory medicine but never by self-medication and if the use of It is not contraindicated. It is much better to go to the Doctor.

As in the previous two cases, a good preventive and strengthening program, elasticity, as well as adequate hydration will not be the panacea but if they will serve to avoid going through such unpleasant experiences.