Running Injuries - Part 2

Contributed by Allan Besselink, PT, Dip.MDT Thursday, 30 August 2007 Last Updated Friday, 29 February 2008

I would suspect that if you read Part 1 of this series, you've probably been left with many questions. Perhaps there are some points that are counter to what you believe to be true - or what you've been told to be true. What I would offer at this point is that "evidence-based medicine" starts with evidence - which is science-based and not belief- or anecdote-based. In the process of finding better ways to look at injuries and their optimal and effective rehabilitation we will almost certainly be uncomfortable with what we discover along the way. It is the ability of the clinician in dealing with this objectively that sets them apart and frees them to find the best options.

If there is a discrepancy of viewpoints regarding the assessment of running injuries, then it snowballs immensely when we discuss treatment options.

Let's face it - if you don't get the reasons for the injury correct, then it makes it pretty hard to select the appropriate aspects of care. "Tincture of time" shouldn't be the primary approach ... because in all reality, if you do enough things over a long enough time and take enough time away from your activity - I bet the pain starts to go away. But if that's 10 to 15 visits (or more) later, aren't we slowing nature's process down?

If you ask any practitioner regarding the solutions to the problems they see in runners, they will all tell you the same thing. "Solutions? Of course, it's obvious isn't it?"

Then the "obvious" may lead us to the tight calf muscles, the tight psoas muscle, the pronated foot, the weak core musculature, perhaps even that your cranial bones aren't aligned (yes, I've heard all of these!). Follow that up with the following ... (please insert tongue in cheek as you read the list) ...

- "you'll come to see us twice a week";

- "we're going to do this treatment on you, but it's going to require a number of visits for the protocol to work";

- "you need to be stretching" (it's the one thing we are all guilty of, isn't it? Nothing beats promoting guilt in the patient, right?);

- "you need to be doing some core strengthening" (another nebulous area that will promote guilt in just about everyone);

- "let's have you start with some aquajogging, it's good for these things" (and good for teaching you how to run on the moon - with about the same level of gravity to fight);

- what do you do about your training? "Just come back slowly, that's all. Of course that's not until we finish your treatment and you're ready to run - it will be 4 to 6 weeks before you start running, you can aqua jog in the meantime", and then

In all seriousness - how many people do you know that have been given this answer or something vaguely similar? I suspect I already know the answer. My tongue-in-cheek list of responses is drawn from listening to patients tell me what they have experienced with their injuries in the past - so the truth is, as they say, stranger than fiction.

Historically, most treatment options have produced patient dependency upon the clinician. "Come to me and I will fix the problem" is the mantra. Those who talk about "patient empowerment" rarely know what the phrase truly means - and it doesn't mean being in the clinician's office three times per week ad infinitum.

Let's set the record straight again ...

If there is one factor that we know is directly related to the onset of running injuries (namely, "too much too soon"), then treatment needs to address two issues: the training stimulus itself, or the body's ability to adapt and recover from the training stimulus.

If the rate of application of training stimulus exceeds the rate of adaptation and recovery, injury will occur. This is an elemental aspect of how human anatomy and physiology works. It doesn't wait for 4 days or 2 weeks or 3 months before adapting - because a delayed response like that impedes our potential to thrive on the planet successfully. The body seeks to attain a state of balance (or homeostasis) at all times. The body also adapts readily to the imposed demands given an environment in which to do so.

So while many are seeking the "next great treatment" in running injuries, I would offer that we already have the greatest solution - and that is to create an environment in which adaptation can occur.

The human body, as I have said before, is an amazing entity. It will always adapt to the demands imposed, and it will do so fairly readily and consistently. Give the tissues what they need to repair and remodel - and implement a graded progression of run training - and you're well on your way to rehab nirvana.

Darn - my secret is out now.

Part of this is about providing the tissues with a stimulus that will promote repair and remodeling. It's much like taking medicine - if you don't take the right dosage of the right medicine, you won't get the right effect. The same is true with tissue repair and remodeling - if you don't have the right stimulus (or the right amount of it), you won't get the goal result. This is predictable and consistent amongst young and old. Tissues need to be challenged - and using the right dosage is necessary for this to be effective.

The second part of this is about implementing a graded progression of loading (which includes their run training). "Just start back up slowly" is, quite frankly, an unacceptable answer. There needs to be a structured progression of loading - and this requires not only communicating with the athlete but finding out what is expected in their training program, assessing it critically, and implementing sound sports-science based approaches to their progression. If you've not succeeded in returning the athlete to their normal functional activities (and perhaps this is in conjunction with the input of the coach), then frankly I don't feel the job is done.

Unfortunately, the reality is that in many cases, runners are left hanging. They are either treated forever and ever (or what seems like that anyways) as this is the "standard" that is expected (or that their insurance will cover), or they are told that this is reasonable because "these things take time to heal", or they are told "your problem is fixed" without any structured guidance to resumption of their function. Yes, this has become the accepted standard of care - and frankly, given what we KNOW about human physiology and anatomy in the 21st century, this is unacceptable.

So what would the scientific body of evidence suggest IS acceptable?

Discuss the expectations with your practitioner - they should be able to give you an expected prognosis and time frame from day one. Our bodies respond readily - and if you're 3 to 5 visits down the road without a discernible and expected change in your FUNCTION, then it's time to move on. If the body hasn't changed, then either something is preventing it from changing (i.e. nutrition) or the necessary stimuli to evoke change (i.e "the treatment") isn't right. It's all about establishing cause and effect in a system that will repair and remodel readily if you simply give it the right things to do so.

If the treatment isn't facilitating change, then it's time to re-think the treatment. Or the initial assessment. Or both.

The other caveat that I would add is that there should be some element of self care involved in the approach. If you've been told that the care of the problem involves a practitioner fixing you and you've not got a game plan of your own to pursue outside of that from day one - then I would seriously question the approach to care. The task is to foster independence, not dependence - and that is a fair goal and expectation from the patient's perspective. Health "care" is about YOU and YOUR function, not the practitioner nor the insurance company.

Hopefully this will add another step towards being an informed health care consumer - and getting back to your sport activity optimally and safely.

In the final article of the series, I'll discuss how to "stay out of trouble" in the first place - an injury prevention program for runners.

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