

## Tennis iCoach FITNESS FIRST

Injuries can affect players at all levels. Following some simple routines can reduce the risk of being left on the sidelines

“There’s a big difference between someone having a muscular injury and twisting your ankle,” says Andy Murray. “Twisting your ankle is bad luck. If there’s muscular sort of injuries, then that’s something different. That can be down to either not training hard enough, or training too much.”

For the professionals, injuries can at worst be career ending, at best a temporary loss of earnings. Regardless of whether you play professionally or recreationally, being sidelined is frustrating. Injury prevention can be a real challenge for any player, no matter what standard. But by improving stability and following a simple warm-up, cool-down and stretching routine, you can reduce your risk of picking up injury niggles and even more serious problems.

Stability is a term used to describe the motion of a joint such as the hip, knee or the shoulder. Instability refers to an absolute increase in the available range of

**“IT’S NOT EASY TO STAY POSITIVE WHEN YOU’RE OUT FOR MONTHS BUT IT EMPHASISES HOW MUCH YOU REALLY WANT IT”**

motion beyond normal limits, or abnormal motion at the endpoint of a joint’s range of motion.

“There are good things and bad things to having a loose shoulder,” said Maria Sharapova, who has been plagued by shoulder injuries throughout her career and had surgery to repair a torn rotator cuff in 2008. “I’m very flexible and my joints are very loose. In a way that’s very good because your body is not tight, but on the other hand you’re very loose and more prone to getting injured.”

The body has two key types of muscles, movers and stabilisers. The large muscle groups, those responsible for movement, have an obvious function and are visible to see, but there are smaller groups of muscles that lay deeper in the spine, abdomen, pelvis, knee, hip and shoulder girdle, which play an equally

important role. These stabilising muscles hold everything in place while the body is moving to prevent injury. While the gluteus maximus is one of the most powerful muscles in the human body, the lesser-known gluteus minimus helps stabilise the hip.

By training stabilisation muscles in addition to major muscle groups, these muscles protect the ligaments and joint architecture. Stabilisation muscles help to keep the body from going beyond its normal movement limits. Sharapova often plays with an American football as part of her training to build up the stabilisation muscles in her shoulder.

While strengthening and maintaining these groups of muscles is a daily part of a professional player’s routine, it is perhaps not at the top of the list of priorities for those who balance playing tennis alongside a full-time job or education.

While biceps, triceps and deltoid (shoulder) muscles help improve strength for tennis, the rotator cuff plays a key role in the rotation of the shoulder, making it important for most shots in tennis, particularly the serve.

A weak rotator cuff can cause shoulder instability resulting in joint problems, pain and damage to the joint and ligaments, and ultimately time out of the game. After failing to rehabilitate the injury to her right shoulder, Sharapova underwent surgery in October 2008 and did not play again until March 2009.

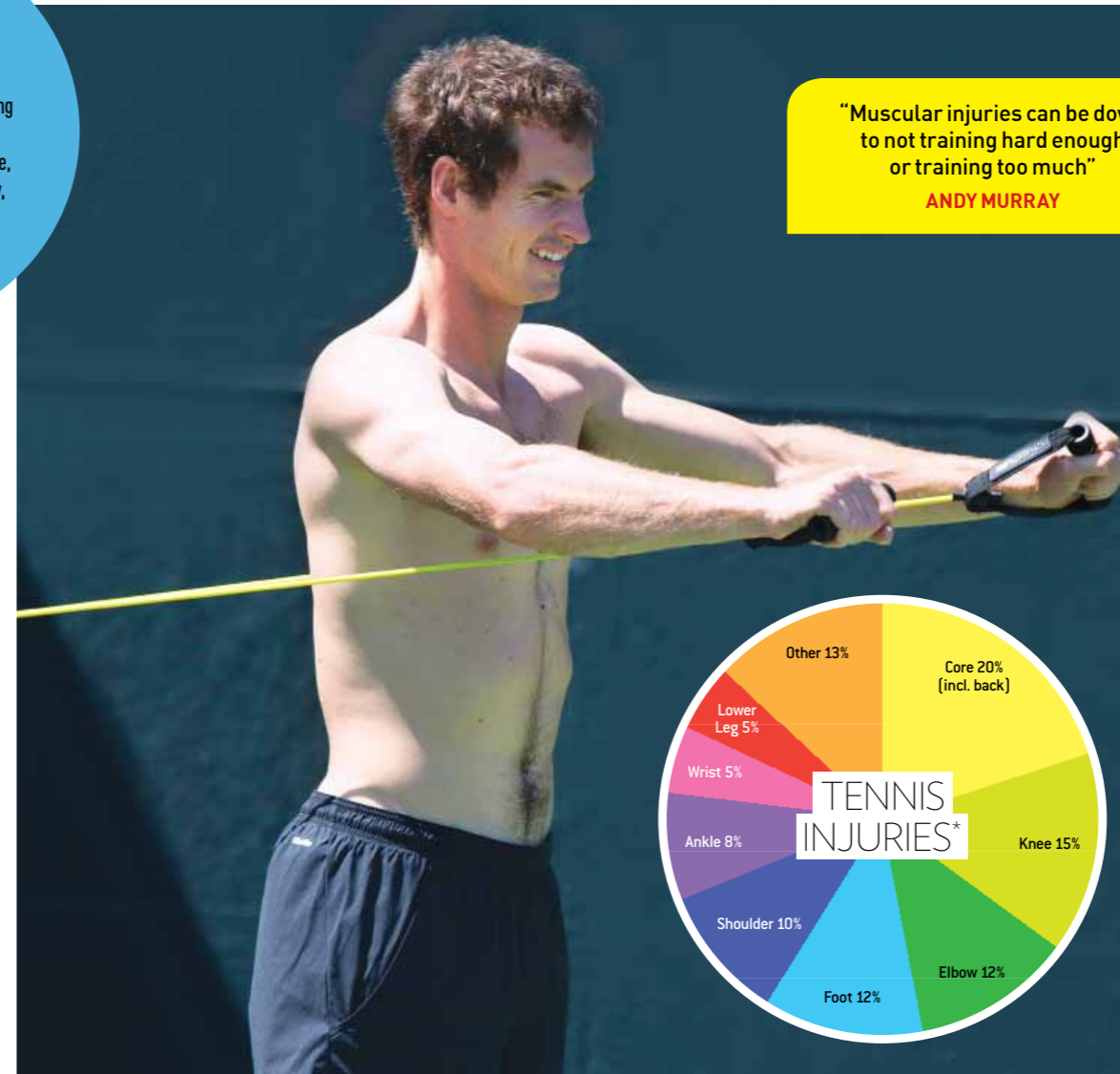
Normal aerobic exercise routines such as running, cross-training and even game time do not satisfactorily address the training of the stabilisers. In fact, it is often the case that the more you play, the more you will need to work on these stabilisation muscle groups.

Using an elastic exercise band, a useful addition to every player’s kit bag, rotational exercises for the shoulder joint, rotator cuff and scapula will help increase stability in the joint. Speak to a qualified trainer or physician to obtain a range of stability exercises for the whole body.

Maintaining strong muscles in the core can also help prevent a wide range of injuries including abdominal strains during the service motion. A strong core is

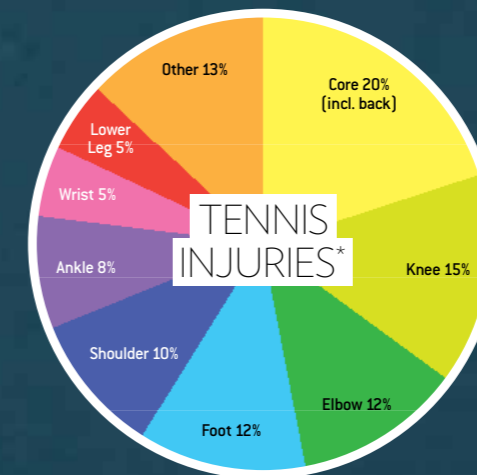
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“Muscular injuries can be down to not training hard enough or training too much”

ANDY MURRAY



essential as it joins the lower and upper extremities, which are used to generate power in every stroke.

Before and after every match or training session, time should be allocated for warming up and cooling down. Warming up increases blood flow to the muscles, increases body temperature and speeds up the nervous system. Light jogging or a short cycle followed by various footwork patterns such as shuffling, crossover steps and back-peddalling will help warm up the lower body. Shadow strokes and shoulder stability work can help prepare the upper body.

Dynamic stretching is preferable to static stretching during warm-up as research studies have indicated that static stretching can decrease power output for up to an hour after completion. Controlled swinging or rotation of the arms, legs and torso – around 10 to 12 repetitions – should be performed to prepare the muscles for exercise. This can be complemented by some light static stretching on any very tight areas or areas prone to injury. ■

This article is based on information extracted from Tennis iCoach and the ITF Advanced Coaches Manual, written by Miguel Crespo & Dave Miley. Information edited by Miguel Crespo, Merlin van de Braam and Abbie Probert.

**Above:** To stay at the top of the rankings, players such as Andy Murray have to maintain their fitness in order to play a full schedule

\* Source: ITF Coach education



### UNLUCKY BREAK

Former world No.4 Tim Henman recalls how a broken leg in 1993 resulted in five months on the sidelines

→ “I was playing a challenger in Singapore, it was the middle of the second set. I’d never had a problem with my ankle before. I was running around to hit a forehand and I just pushed off my left leg to move forward and the bottom of my tibia broke in three places. I knew at the time it was pretty serious.

I had surgery when I got back to the UK and had three pins put in. From the day I broke it to the day I played my next match was five months, which is not too bad as an injury like that goes.

It was very difficult. My ranking had gone up from 1,000 to inside the top 150 in a couple of years and I was really moving in the right direction and to break my leg was a massive setback. But that’s the nature of the beast, in professional sport you’re always going to have injuries and bumps in the road that you’ve just got to deal with and get healthy, and move on.

It’s not easy to stay positive when you’re out for months but I think it emphasises to you how badly you want it. You can always take positives out of pretty much any situation, and it gave me a chance in my rehab to work in different areas and get stronger, perhaps in the upper body.

You have to work through the rehab because you’ve got to gain confidence physically but also mentally. You’ve got to make sure in your rehab that when you compete again you’re 100% – there’s no point being 90% physically and mentally, you’ve got to be 100% in both areas.”