

OSTEOPATHS

target root of injuries

ALL SPORTS COME with a risk of injury, but for a triathlete that risk is multiplied by three. For example, due to the high demand that swimming places on the shoulder, a swimmer might be at more risk for shoulder injuries than a runner. The runner might be at more risk for knee injuries than a cyclist, who in turn might be at more risk for back injuries than the swimmer. Triathletes are susceptible to all the injuries that commonly affect swimmers, cyclists and runners. But, if a triathlete gets knee pain when running, the root cause may not be because of running.

Osteopaths are experts in assessment, trained to diagnose injuries by zooming out of the painful area and looking at the whole body, then prescribing strategies and therapies that focus on the root cause of injury. This enables them to find out

WHOLE-BODY ASSESSMENTS MAP ROUTE TO RECOVERY

BY ED PAGET AND INKA WEISELL

why symptoms arise in the first place — changes in one area of the body can have profound effects on the mechanics of seemingly unrelated areas. Muscle imbalance, hypersensitive nerves and structural misalignment can all delay the body's natural recovery.

Chiropractic and physiotherapy are well known for therapies such as manipulation and ultrasound. Osteopathy encompasses many different modalities to help resolve injuries and does not rely on just one. During a typical treatment, you can expect anything from visceral release, myofascial unwinding, joint articulations and mobilizations, deep tissue work,

nerve entrapment release, cranosacral techniques and, as we shall discuss, specific functional stretching.

Knee pain can strike a runner at any time in many ways — a misstep or slip can damage ligaments or cartilage and the onset of these major injuries is obvious. In the case of the triathlete, there is a more insidious and variable type of knee pain that often has a gradual onset. Sometimes it creeps up after 20 minutes of running and shifts around the knee, or at other times, it is there from the get-go. There are many labels for this type of knee pain — some call it patellofemoral syndrome or runner's knee — but labels do not point to a cause.

STRETCHING IN 3D

THE MOST PROACTIVE way to prevent the bike from affecting your run is three-dimensional

stretching, targeting the dominant hip flexors, namely the ilio-psoas, and stretch it in all three planes of motion. Static stretching will be helpful to a degree, but functional stretching will include more muscle fibres and provide stimulation to the nerve endings in the muscles, tendons and ligaments. This allows the body to actively use and control the new range of motion that comes from the movements. In the stretches pictured at the right, we are using a True Stretch which provides a safe, stable environment to stretch these muscles. These stretches can easily be recreated without this device. Ed Paget is using a technique called Functional Manual Reaction to help isolate the stretch to the front of the athlete's right hip.

Stand in a position similar to your running stride but exaggerate the stride length and arm movements.

With your back leg raised up behind you, push your pelvis forward until you feel a stretch at the front of the hip.



Move the hips forward and backward to stretch in the sagittal plane.

The knee is inherently weak as the joint itself has a lot of mobility. During running, the knee is in a vulnerable position for injury as it is surrounded between two areas with a lot of stability, namely the hip and foot. The hip, despite its great potential for range of motion, has a lot of bony congruency, ligamentous and muscular support. The foot is very stable due to the limited mobility of its joints and the way it relates to the ground. If the foot doesn't adapt to the ground properly, if the ankle is restricted or the hip is too tight, the knee is asked to pick up the slack. The knee will take on the strain and if it had a voice it might say: "OK body, we're running, so it's probably an emergency. Even if the hip and foot aren't doing their jobs, I'll do the best I can to get us out of here, damn the consequences."

An osteopath will consider how tightness in the hip could cause strain or misalignment in the knee and acknowledge how stiffness in the upper back (thorax) may change how the core muscles activate, and consequently, the mechanics of the pelvis and knees. An osteopath would also look at how an old ankle or foot injury

might be affecting the movement up "the chain" to the knee.

An osteopath applies a holistic view to the sport the athlete is doing to learn if training in the pool or on the bike could be the underlying cause for pain when running. It is common for cyclists to have tight and short hip flexors. This is an adaptation to the requirements of cycling, but it doesn't translate well to running,

can lead to an overuse injury of the knee. It is not overuse in the sense that the person is running too much, but overuse in that the body is asking too much from that the knee during running. Building up muscles near the knee or taping the kneecap might provide temporary relief, but the solution to the knee pain is to get the hip, ankle and foot sharing the load with the knee. One powerful strategy to do this is to free up

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where we need a strong and long hip flexor to allow the hip to extend backward for optimal stride length and propulsion through the big toe.

If the hip flexors prevent the hip from extending adequately, the stride will shorten and the leading foot will not be placed in an optimal position for shock absorption. This alteration in running gait

the range of motion and build strength in the hip, so the knee doesn't have to pick up the slack anymore. ■

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Move the hips side to side in the frontal plane.



Rotate the hips left and right in the transverse plane.

