

## How the Body Works...

### The Hip Does It All

The influence of the hip region on the rest of the body is underestimated. The HCE therapist has a good understanding of its influence and the problems that arise from the hip joint and the surrounding muscles.

There has been a lot of emphasis on the hip joint itself with the increasing use of Total Joint Replacements (THR) as a treatment for Osteoarthritis of the hip (OA). In addition to the hip joint there are a number of problems that can arise from the muscles about the hip and in particular the muscles that lift the hip out to the side, the hip abductors.

These muscles contract when walking and control the weight bearing hip position while on one leg. Weakness will result in a sway of the hips when walking and can affect alignment of the knee as well. It is important for these muscles to be strong as they can reduce the stress on the hip joint and may delay or prevent the need for hip surgery later on.

*Continued on Pg. 2*



## Truths/Myths

### *'If It Is Tender—It is Bursitis or Tendinitis...Maybe!'*

Have you ever had pain or tenderness on the outside of your hip? This pain is often made worse by lying on it in bed or it may even hurt when you lay on the good side and the top knee rests forward. Walking and climbing stairs may also make it worse. When it does not settle down, you go to the doctor. They press on it and it hurts. The x-ray of the hip joint is normal. Guess what? You have a diagnosis of Trochanteric Bursitis. The bursa is a like small zip lock bag with a small amount of fluid in it that lies under the tendon. This is to allow structures to slide over each other. In this case the tendon over the outside bone of the hip. If the structure is inflamed it is followed with the 'itis' term. Hence

a bursa becomes bursitis and a tendon becomes tendinitis. The usual treatment is anti inflammatory medication and stretching of the tight structures over the side of the hip that are thought to be causing the bursa to be irritated. Myth, it is a bursitis. It could be argued that in order for you to be given this 'itis' diagnosis there needs to be evidence of inflammation. Sadly this is not the case. Recent studies show that this type of pain is not the result of inflammation and that only 8% of the patients show that the bursa is distended and when it is, it is not inflamed. Stretching should only be performed when a) there is evidence of a structure being tight, b) that being tight is the cause of the irritation. In many of

these cases the side structures are not tight and in fact stretching will make the problem worse because the real reason for the problem is that the tendon becomes compressed. This is why lying on it, walking and climbing stairs all make it worse. These are compressive positions or activities.

Truth: do not stretch if the pain increases with standing on one leg, lying on it and sitting with the legs crossed. You need to see your HCE physical therapist to determine the cause and the correct management of this tendinopathy (tendon pain).

# How The Body Works...

## *The Hip Effects It All* From Pg. 1

The main group of muscles that support the hip are the gluteals. There are three of them, the deepest being gluteus minimus. This muscle contracts first when weight bearing on one leg and tends to rotate the leg in wards. The muscle on top of this is the gluteus medius. This is a major muscle used in lifting the hip out to the side when not standing on the leg. It also stops the hip from going out to the side when weight bearing such as walking, standing and running. The largest of the gluteal muscles is the most famous, gluteus maximus. The lower part extends or brings the hip backward while the upper part helps gluteus medius stabilize the hip and lift the leg to the side. Down the side of the leg from hip to the knee is a long band called the ilio tibial band. Parts of gluteus maximus attach to this along with a smaller muscle more in the front of the hip called tensor fascia lata. Basically there are the deep and superficial side hip muscles. The deep tend to get weak and the superficial ones will take over. The deep ones are the gluteus minimus and gluteus medius while members of the superficial group are gluteus maximus and tensor fascia lata. It is hard to do specific deep side muscle exercises without supervision but one exercise you may try is laying on your side with a pillow between your knees so the knee is not below the top hip joint to start. Lift your straight leg up to the side. It has to be done correctly, so make sure you do not cheat by letting the hip roll back or the leg come forward. It has to be done in the line of the straight body. Do this slowly with control 20 x per day.



Side Hip Lift Start Position



Side Hip Lift End Position

## Healthy/Unhealthy Habits

### Is the way you stand healthy?

The way in which you stand can be healthy or unhealthy. The tendons on the outside of the hips do not like being stretched or compressed. How you stand can affect this.

For example, some like to stand with the hip out to the side. This increases the angle of the tendon as it goes over the most outside bone on the hip. The compression that results can cause pain and change the health of the tendon because of the compression.

Sitting with the legs crossed will do the same. So if you have



outside hip pain try to stand evenly on the legs, do not cross your legs, and support your knees with a pillow between them when you are lying on your side.

If changing positions improves your pain, it is telling you that this is part of the problem and either continue to do these until it goes away or seek out an HCE therapist for more advice.



# True Stories...

## *The HCE Difference*



Amy was a 20 year old college student who had been having pain in her left ankle for a few months. This was being treated by her physician with medication and physical therapy which focused on reducing her pain using ultra sound and electrical stimulation and basic 'theraband' exercises for strength and balance training. She was also using an ankle brace to enable to walk with reduced pain. She was not having any success with this treatment plan and was referred to our clinic for a different approach.

The ankle was swollen and tender. Her range of motion was limited when she bent the foot up and out to the side, along with a sharp pain on the outside of the ankle when the foot was bent down. Assessing her ankle more closely resulted in finding the ankle joint restricted and being held in the wrong position. She also demonstrated some muscle weakness. The lower leg was restricted in its rotation movement and looking further up the leg, the hip was restricted in its ability to go out to the side as a result of tight groin muscles.

Treatment on the first visit addressed the ankle and foot joint position problems with mobilization and then holding the gained movement with taping. The hip was also stretched. The increased movement was reinforced with movement exercises, resulting at the end of the visit with a 30% reduction in pain.

During the following four visits her exercise program was progressed to a point where she did not need corrective tape. She was discharged after the 6th visit with 75% reduced pain, much improved single leg standing time and abolished left leg limp. Her home exercise program was reviewed and the patient returned to college being able to walk as needed without the need for her brace.

Any clinician can treat the pain. It takes more skill to look at the patient as a whole person and be able to determine if other structures are implicated. In this case the patient was fortunate to be seen by a therapist with the skill to consider all factors that may have affected her.

Health Connections Enterprises therapists are trained to treat their patients in a comprehensive manner and not just chase the pain