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### ABDUCTOR TENDONITIS OR ABDUCTOR TENDON TEAR

#### **Diagnosis**

Lateral sided hip pain that is reproducible with direct pressure over the outer aspect of the hip is generally due to abductor tendonitis, a torn abductor tendon or greater trochanteric bursitis. Other, less likely explanations of your symptoms include hip osteoarthritis, occult fracture of the proximal femur, lower lumbar (back) spondylosis, lumbar spinal stenosis and neuropathy (nerve injury or disease) of the superior gluteal nerve. Based on your history and physical examination today the most likely diagnosis of your symptoms is either abductor tendonitis, greater trochanteric bursitis (or both), or a torn abductor tendon.

The gluteus medius and minimus muscle-tendon complex is the primary stabilizer of the hip and inserts on the upper portion of the femur at the greater trochanter. Inflammation and/or degeneration of this muscle-tendon complex is called abductor tendonitis.

An abductor tear is characterized by a severe strain of the gluteus medius muscle that can result in either a partial or complex rupture of the muscle. This is like a rotator cuff tear of your hip.

The greater trochanteric bursa is a fluid-filled sac that lies between the greater trochanter and the gluteus medius and minimus muscle-tendon complex. Swelling and irritation of this bursa is called greater trochanteric bursitis. The only definitive way to determine whether your symptoms are from abductor tendonitis, abductor tear or greater trochanteric bursitis is by getting an MRI.

## <u>Treatment</u>

Treatment for greater trochanteric bursitis generally involves an injection of cortisone into the bursa. It can be curative but at the same time it may exacerbate deterioration of the abductor tendon. Our tendons break down every day and repair themselves when we rest. When the breaking down process exceeds the reparative process tendonitis can occur.

Things that cause the tendons to break down include nicotine (smoking or chewing), caffeine (caffeinated coffees, sodas or teas), the antibiotics ciprofloxacin and Levaquin, oral, inhaled or injectable corticosteroids, a diet lacking in adequate amounts of animal protein, poor sleep hygiene (obstructive sleep apnea or insomnia), and metabolic/hormonal abnormalities (too much or too little thyroid hormone, parathyroid hormone, insufficient vitamin D...).

Treatments depend on the severity and duration of your symptoms. We start by encouraging lifestyle changes including:

1) If you are a smoker, you should quit. There are medications that can be prescribed by your primary care provider to help you quit smoking and support groups to assist you in meeting your goal.

2) If you drink caffeinated beverages decrease the number of caffeinated beverages you drink and try to eliminate them completely if possible.

3) Make sure you eat protein with every meal, breakfast, lunch and dinner.

Additionally we recommend medical treatments to optimize tendon health including:

4) Avoid the antibiotics ciprofloxacin and Levaquin unless no other medications can be used to treat your particular infection.

5) Avoid steroid injections into the tendon/bursa as this may cause further deterioration of the tendon and possibly cause it to tear.

6) Consider being evaluated for sleep apnea if your sleep is not restful or if you suffer from insomnia.

7) See your primary care provider or an endocrinologist to evaluate and treat you for metabolic/hormonal abnormalities. Often times if an abnormality is identified, correcting this can be curative.

Treatment of abductor tendonitis is multifaceted. This includes the following:

#### **Physical Treatments**

Activity modifications such as the avoidance of high impact activities such as running/jogging and replacing them with lower impact activities such as cycling or swimming. When walking for exercise, use walking sticks to take the pressure off the lateral aspect of the hip.

Chiropractic care can be very helpful in treating abductor tendonitis. Tendonitis responds very well to joint manipulation as well as ultrasound therapy and ice. A chiropractor can offer pain relief and increase mobility with few, if any side effects. If you feel this would be beneficial to you, you can contact a chiropractor in your area for an appointment.

A short course of supervised physical therapy with instruction and eventual transition to a home exercise program is often also beneficial. The home exercise program needs to be incorporated into your daily routine several times per week to keep symptoms at bay. Again if you would like to try physical therapy you can contact a physical therapist in your area and we can get a referral started for you with a physical therapy prescription. A typical prescription that is given to patients is as follows:

Dx: Abductor Tendonitis Rx: PT eval and treat 1-2 visits per week for 3-4 weeks

Develope a home exercise program. Emphasize modalities such as deep tissue techniques and the use of a foam roller

#### Medical Treatments

Non-narcotic pain medications (if tolerated, not allergic or contraindicated) are usually helpful. Naproxen (Aleve) 500mg twice a day or ibuprofen (Motrin) 600-800mg three times a day may be taken with food or milk. Acetaminophen (Tylenol) 1000mg three times per day can be taken in addition to naproxen OR ibuprofen.

If you are taking naproxen or ibuprofen regularly, check with your regular doctor as they may have side effects such as increased blood pressure or lead to the development of a gastric ulcer. Your primary care doctor can help you in managing the amount of non-narcotic medications you should be using and how often.

#### Surgical Treatment

By following the treatment plan outlined above, symptoms can be significantly reduced. It may take several months for them to improve and they may not go away completely. An MRI will be recommended if you have had symptoms for six months or greater. If you have significant weakness when trying to abduct your leg (raise it out to the side) or if you have failed several months of conservative care, an MRI would show whether or not the tendon is indeed torn.

If the tendon is torn, surgery can be performed to repair the tendon by reattaching it to the bone. The procedure is straightforward, is done as an outpatient surgery and relatively low-risk but the recovery is a long, difficult process. In order for the tendon to heal it needs to be immobilized for two to three months after the surgery in a brace. You are not

allowed to put any weight on the operative leg. Often times patients need to go to a rehabilitation center or nursing home for that entire time. The greatest risk of the surgery is that after several months the tendon just doesn't heal and the symptoms still persist.

## Treatment of Chronic Tendonitis without Surgery

Tendonitis tends to recur. If you have been doing well and symptoms return we would recommend another round of supervised physical therapy and non-narcotic pain medications before further diagnostic studies (an MRI). This chronic problem can often be managed by your primary care provider, a physical medicine physician or non-operative orthopedist. If he or she determines that your symptoms have progressed to the point that you need an MRI and the MRI shows an abductor tendon tear you will be referred back to Dr. Stewart for consideration of surgical treatment.

## Treatment of Chronic Tendonitis with PRP Injections

Platelet-rich plasma (PRP) injections have been found to be safe and effective in some cases for the treatment of abductor tendonitis and abductor tendon tears. PRP injections are created from the patient's own blood. Approximately 30-60 cc of blood is drawn from the patient on the day of the procedure. The blood is placed in a centrifuge machine and spun down, which takes approximately 20 minutes. The platelet rich plasma, which is approximately 5-10 cc, is then injected into the abductor tendon to facilitate healing/repair of the damaged tendon. These injections are performed in our office on Friday afternoons. This treatment option is infrequently paid for by insurance companies.

# Additional Resources

Dr. Aron Adkins – Endocrinology Oakleaf Clinics 3802 W. Oakwood Mall Dr Eau Claire, WI 54701 715-839-9280

## Dr. Larry Studt – Occupational Medicine – Work Management

Prevea Health

703 W. Hamilton Ave.

Eau Claire, WI 54701

715-717-4944

Dr. Joseph Hebl – Occupational Medicine – Work Management

First Choice Occupational Medicine and Disability

623 E. Clairemont

Eau Claire, WI 54701

715-834-3164