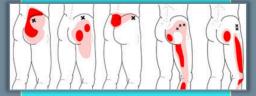


#### What Causes Low Back Pain?

As you may already know, there are many different causes of low back pain. The anatomy and function of your lumbar spine leaves many structures to blame for why you may be suffering from pain in your back.

We have all heard of arthritis, bulging discs, sciatica, SI joint, etc. as being the causes of low back pain. And yes, these can all contribute to pain in back, hip or legs.



What doctors and often physical therapists don't know or don't tell you, is that a major contributor to back pain or even the main cause can be the gluteal muscles.

In my experience, these muscles are always involved and in most cases can significantly reduce or completely eliminate low back pain when treated correctly.

The butt is made up of three muscles — gluteus maximus, gluteus medius, and gluteus

They are commonly referred to as the "glutes," and together, they work to move the leg backwards, out to the side and rotate it outwards.

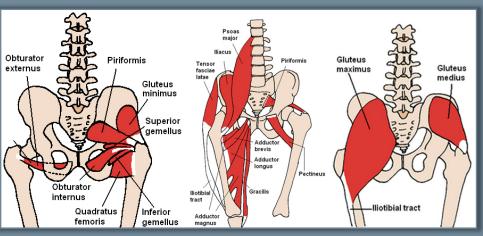
They also stabilize the knee and pelvis, meaning they hold them in place. Likewise, the glutes work to prevent our hips and knees from moving when they aren't supposed to.

But when the glutes are weak or underactive, they don't do that job very well. And that causes problems in the back and knee.

The glutes are the power house of your body and when they are not functioning properly you can develop pain in your low back or legs.

The most common areas to have pain with glute dysfunction is one side of your lower back, across your belt line, or down the back or outside of your leg. Glute weakness can also lead to knee pain and we will discuss this in another guide.

Even with palpable tenderness in low back muscles along the spine, the glutes may still be the main cause. Almost every back patient I treat has near complete reduction in tenderness in low back once the glutes released.



#### How Do You Know if Your Glutes are the Problem?

This is a very hard question to answer. In a lot of cases the pain referred from the glute muscles is located above the pelvis, along the spine. This can make it feel like it is in your back and the muscles along the spine can be tender.

If you press into your glute muscles, above and slightly behind your hip bone, it will likely be very tender and in some cases may even radiate pain into back or leg on that side. Try this on both sides and see if the side your back pain is on is more tender.

Bending over to touch your toes can cause pain in your low back and you will probably feel like your hamstring muscles in the back of your thigh are extremely tight. These hamstring muscles are usually blamed when someone can't touch their toes. You can stretch them and feel like they are loosening up, but after a few hours they are just as tight as before you stretched. I find that >75% of the time I can increase someone's bending by >50% after releasing the glute muscles of the hip. And the great part is they no longer feel tightness in the back of their legs (hamstrings) afterwards.

Other symptoms I see in patients with glute problems are – point tenderness on hip bone (bursitis), mild to severe low back muscle spasms, pain with lifting and twisting, pain when standing up from sitting, pain when in bed and when getting up, and pain radiating down back or outside of their leg to the ankle/foot.

There is no definitive way to know for sure where your back pain is coming from without an in depth evaluation. I can tell you though that the most common symptoms I see in all of my low back pain patients are "tight" hamstrings, "tight" back muscles and significant weakness in the glutes on one or both sides.

Pain from Stenosis, Disc bulge, Pinched Nerve	Pain from Glutes
Shooting pain down the leg: straight down the back or wrapping from side to front of thigh.	Pain down the leg: straight down the back or straight down the side but typically stops at the ankle.
Numbness traveling into the leg in same pattern as above, but also into the foot.	Bending or extending your back cause pain.
Unable to stand up straight without severe pain into the leg.	Unable to stand up straight but no or very little pain into the leg.
Walking or general movement makes pain worse.	Walking or general movement usually improves symptoms.

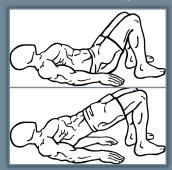




## **Exercises to Improve Glute Function**

#### **Supine Bridge: Both Legs**

- Tighten butt muscles
- Pull belly button to spine
- Lift but and back up at the same time
- Keep butt muscles as tight as you can
- Hold 5 seconds and lower slowly
- · Repeat for 2 sets of 10 reps



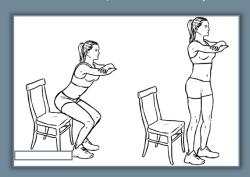
#### **Side-Lying Hip Abduction**

- Keep top leg in line with you body
- Keep foot straight or turn toes down
- Leading with you heel while you raise leg
- Think about lifting your foot
- Slow movement, 4 sets of 5 reps



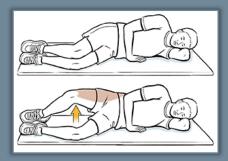
#### Sit <> Stand Squat

- Sit on the edge of the chair and tighten butt muscles
- As you lean forward start pushing through legs
- Keep butt tight through the motion
- Keep weight more on your heels
- Slow movement, 2 sets of 10 reps



#### Side-Lying Clam Shell

- Knees bent to 90 degs
- Rotate top knee up, keep feet together
- Do not rotate pelvis or back
- Repeat for 3 sets of 10 reps



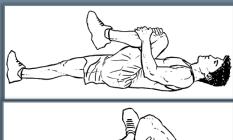
#### Step Ups

- Place foot on step
- Lean forward putting more weight on front foot
- Tighten butt muscles on front leg while pushing down into step
- Slowly lift yourself up while making sure your knee does not rotate inward
- Repeat for 2 sets of 10 reps



#### Stretch After Exercises

• Gentle stretch, 30 sec hold, 4 times each







# Here's what makes Sterner Physical Therapy better

### 1. YOU WILL RECEIVE HANDS ON TREATMENT FROM A LICENSED PHYSICAL THERAPIST AT EVERY VISIT

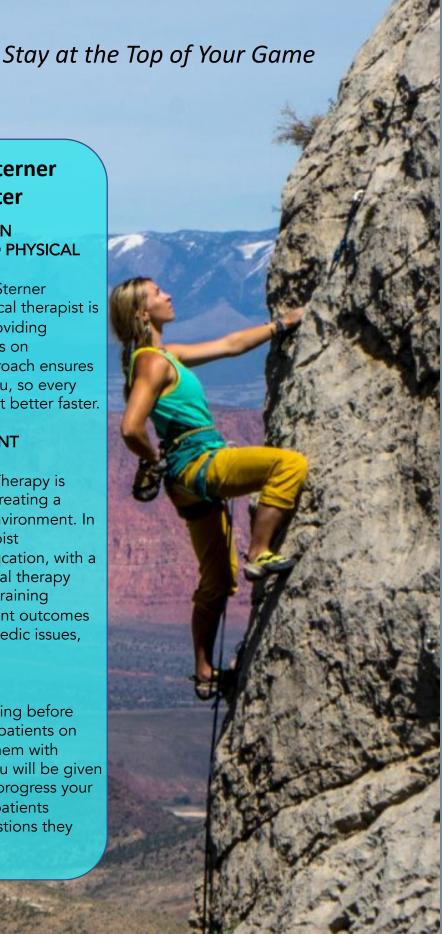
Unlike most PT organizations, at Sterner Physical Therapy a licensed physical therapist is always part of your care team, providing experience, knowledge and hands on treatment. This personalized approach ensures your care plan progresses with you, so every visit builds on the last and you get better faster.

# 2. YOU WILL RECEIVE TREATMENT FROM THE VERY BEST

Every person in Sterner Physical Therapy is highly trained and dedicated to creating a positive experience and caring environment. In fact, every Sterner physical therapist receives extensive continuing education, with a concentration on advanced manual therapy techniques. Our manual therapy training provides significantly higher patient outcomes than other practices for all orthopedic issues, from

#### 3. WE MAKE IT EASY

We offer convenient hours (including before work). We spend time educating patients on exercises and never overwhelm them with pages of homework. Each visit you will be given only 2-3 exercises to focus on to progress your recovery. We communicate with patients between visits to answer any questions they may have.



## STERNER PHYSICAL THERAPY

#### **OUR SERVICES**

- Manual Therapy
- Dry Needling
- Orthopedic Injuries/Pain
- Sports Training
- Sports Injury
- Post-Operative Rehabilitation
- Therapeutic Exercise
- Balance Training
- Vertigo & Concussion Rehab
- Migraine & Headache Treatments

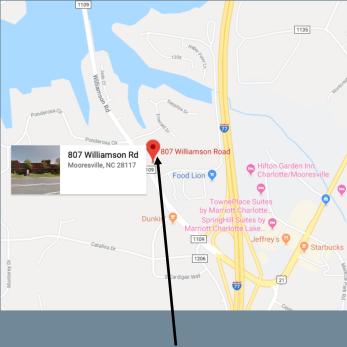


Dry Needling is most effective treatment for all musculoskeletal problems I have ever used with my patients. If you have tried other conservative treatments without success, call us today to learn more about how we can help!



### **CONDITIONS**

- Headaches
- Dizziness
- Neck Stiffness
- Low Back Pain
- Shoulder Pain
- Rotator Cuff Impingement
- Tennis Elbow
- Knee Pain
- Sciatica
- Muscle Strains
- Muscle Stiffness
- Sports Injuries
- Sports Performance
- Plantar Fasciitis
- Many other musculoskeletal conditions



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