4 Essential Strategies For The Correction Of Anterior Pelvic Tilt

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What is Anterior Pelvic Tilt?

Anterior pelvic tilt is a type of postural distortion that occurs when the pelvic bones are rotated forward and down as if it was a bucket of water, pouring water onto your feet. This distortion is extremely common and correlates highly to lower back pain.

If you imagine your pelvis as a bucket of water, and you were to pour water onto your toes, that would involve the bucket of water tilting forward and down. That is what's referred to as anterior pelvic tilt. Now, if the bucket of water poured the opposite direction, pouring it behind your heels, that would be called posterior pelvic tilt.

Pelvic tilt is critical to know, particularly with individuals who suffer from lower back pain, because it has a high correlation to the curvature in the lumbar spine (last 5 vertebrae). For example, as the pelvis tilts more anterior the arch in the lumbar spine increases. (called lumbar extension) As the pelvis tilts posterior, the lumbar spine begins to flatten. (called lumbar flexion)

In many years of being a successful neuromuscular therapist, I have noted that in many cases, as pelvic tilt is brought back to its normal position, there is a corresponding decrease in lower back pain.

This pain relief is usually brought about by decreasing muscular activity, particularly in the overloaded muscles that are contributing to the anterior or posterior pelvic tilt. Also, in cases of spinal derangements such as disc herniations, spondylosis, stenosis, spinal degeneration and others, bringing neutral pelvis into the mix will serve to decrease further dysfunction in the spine and serve to support it through proper muscular balance.
What are the Causes of Anterior Pelvic Tilt?

Anterior pelvic tilt is characteristically a result of muscular imbalance in the muscles associated with the pelvis and hips. Specific muscles that are prone to becoming short, tight and facilitated will cause the pelvis to tip in an anterior direction. Its opposing muscles, which contribute to posterior pelvic tilt, generally become lengthened and weakened.

It is frequently thought that our sedentary society, particularly one that spends a lot of time sitting, perhaps at a computer job or so forth is a significant contribution to the incidence of anterior pelvic tilt. While I do agree that sitting increases the likelihood of developing anterior pelvic tilt, it is by far not the only reason for the dysfunction. I have worked with dozens of individuals with both kinds of excessive pelvic tilts, with a many of them having seated jobs.

The reality is there are many things that contribute to muscular imbalance. Not all causes being structural or biomechanical. I'll talk a little bit about this later when we get to the section entitled hidden causes of anterior pelvic tilt.

Muscles to Stretch for the Correction of Anterior Pelvic Tilt:

The muscle imbalances associated with anterior pelvic tilt are far from complex. There are four principal muscles involved in anterior pelvic tilt and through correcting them, will make a significant improvement in the positioning of your pelvis. After these four principal muscles have been corrected, that it is important to assess your pelvic alignment and if it’s still is not in a more neutral position, then going after additional muscle imbalances may be necessary in order to get full correction.

Muscle Imbalance Group #1: Psoas and Rectus Femoris:

The Psoas muscle is critical to correct in anterior pelvic tilt. It has a dual role in that its job is to flex the hip and also contribute to the anterior motion of the lumbar spine. In fact, it attaches to all five of the lumbar vertebrae. The psoas, when it is too strong or tight, contributes to excessive extension of the upper lumbar spine, while creating flexion of the lower lumbar spine. Plus, excessive tension in the psoas is capable of creating significant stress to the lumbar spine.
How to Stretch the Psoas Muscle: Standing Psoas Stretch

The rectus femoris, which is commonly known as part of the quadriceps muscles, is also contributes to flexing the hip and has a secondary role of extending the knee. The rectus femoris, unlike the psoas does not connect to the lumbar spine. But instead, connects to the front of the pelvis.

Individuals that perform lots of quadricep dominant activity such as running or sports that involve only a partial range of motion are highly prone to excessive tension in the rectus femoris. The good news is that this muscle is easily lengthened and can be taken out of the equation relatively easily.

How to Stretch the Rectus Femoris: Kneeling Hip Flexor Stretch

Keys to stretching the Rectus femoris:
1. Perform a posterior pelvic tilt.
2. Squeeze your glutes to increase the amount of posterior pelvic tilt, which will intensify the stretch.
3. Hold your pelvis in position, then shift your weight forward to your front foot until you get a maximum stretch.
**Muscle Imbalance Group #2: Lumbar Erectors**

The lumbar erectors, which are the muscles that run up the sides of your spine, are important to address in anterior pelvic tilt. A commonly held belief is that these muscles are actually tight. By tight, we have to make the distinction on whether that is a “feeling” of tightness or whether the muscles are not meeting normal range of motion requirements. Typically, these muscles are not actually tight, but more along the lines are found in a shortened position due to excessive tension in either the psoas or rectus femoris. Stretching the lumbar erectors can be either challenging or even unsafe depending on the spinal condition. I prefer not to directly stretch them, but rather perform massage therapy techniques to effectively release them or perform lower abdominal exercises, which will directly decrease excessive tension and cause them to return to normal length.

When you do the lower abdominal exercise that will be presented later in this report, it should be effective at reducing the curvature of the lower back by effectively stretching the lumbar erectors sufficiently.

**Muscles to Strengthen for the Correction of Anterior Pelvic Tilt:**

The following muscles are frequently “shut off” due to excessive tension in the muscles listed above. Many times, very light, controlled motions can quickly strengthen these muscle groups, which can immediately give relief to chronic back pain sufferers.

**Muscle Imbalance Group #3: Glutes and Hamstrings**

The glutes, more affectionately known as your butt muscles, and your hamstring muscles, which are the long thick muscles on the backs of your legs, are significant contributors to posterior pelvic tilt and they are functional opposites or antagonists to the psoas, rectus femoris, and the lumbar extensors. These
muscles are frequently weak due to the fact that they were primarily fast twitch muscles. Fast twitch muscles are generally activated during large motions such as squats, and even lunges. These muscles are built for strength and speed and thus in today's society, where people don't move enough, suffer from weakness and disuse.

Activating and strengthening these muscles requires a bit of precision. It's very easy, if the pelvis is not held in the correct position, to improperly over-recruit your lower back muscles and lead to the exercises being ineffective at correcting anterior pelvic tilt. So, practice PRECISION!

**Glutes**

How to Strengthen Your Glutes and Hamstrings: **Supine Hip Extension**

*Keys to strengthening your glutes and hamstrings:*

1. Start with your heels about 12 inches from your glutes.
2. Make sure your hips and knees are hip-width apart.
3. Activate your glutes FIRST to initiate the movement.
4. Do NOT over-arch your lower back.
5. Stop when your glutes are fully squeezed.
6. Emphasize putting the weight on your heels.
**Muscle Imbalance Group #4: Abdominals**

The abdominal muscles are probably the most misunderstood muscle group in the back pain equation. More often than not, the incorrect exercises are prescribed for the wrong muscle groups in the abdominal wall and are often prescribed using inappropriate repetitions, sets, and intensity. The wrong exercise prescription for this muscle group will inevitably lead to failure in addressing chronic lower back pain, and in the correction of anterior pelvic tilt.

I will caution you this now, you MUST perform these movements with as much accuracy as you possibly can. And quite frankly never be satisfied with your level of sufficiency in performing them. I highly recommend that even at some point in the future, when you have less pain or no pain at all, that you continually revisit these movements to check for your proficiency in performing them. I truly believe that the ability to perform the activations of this muscle group correctly is the key to long-term back pain relief.

The abdominal muscles are frequently weak due to all of the other muscle imbalances described earlier in this report, as well as some hidden factors that I will address later on. This muscle group is incredibly sensitive to the influence of stress, as well as biochemical changes in your internal organs.

This muscle group, like others, has attributes for both endurance as well as strength. The deeper layers of the abdominal group have the primary function of protecting the internal organs as well as creating spinal stability. These muscles are primarily endurance driven, and need to be exercised as such. The outer muscles of the abdominal wall have a primary function of performing larger motions that require more force, such as bracing the spine during sporting activity, or protecting the internal organs against major impact, such as during boxing.

There are four primary muscles to be aware of in the abdominal group:

- **Abdominal Muscles**
- **Transverse Abdominus**
The Rectus Abdominus

The rectus abdominus is commonly known as the six-pack muscle. This is the outermost muscle in the abdominal group. Its primary job is to flex the spine, depress the sternum, which involves bringing the chest downward, and can contribute to posterior pelvic tilt.

The External Oblique.

The external obliques are the muscles that lie next to the rectus abdominus, and their function includes rotation of the spine, side bending the spine, and may contribute again to posterior pelvic tilt.

The Internal Oblique

The internal obliques lie just underneath the external obliques and essentially perform the same type of function with the exception of being the opposite. For example, the right internal oblique will rotate the spine to the same side, while the right external oblique rotates the spine to the left.

The secondary role of the internal obliques is to perform posterior pelvic tilt, and also can contribute to side bending.

The Transverse Abdominus

The transverse abdominus is the muscle that is getting most of the buzz in the back pain community. There seems to be quite a debate about this muscle and its importance to the back pain suffer, and many individuals, particularly in the strengthening community are not a fan of using it to increase spinal stability. As with anything else in life, we need to be able to notice, what does and what does not work in specific situations and utilize various tools and techniques to achieve our outcome.

My only rebuttal to the strength training individuals is that many of them do not spend most of their time rehabilitating individuals with chronic lower back pain, but rather spend time coaching individuals with higher levels of fitness, who are compensating very well many times for a lack of internal spinal stability. The feedback that is generated from back pain sufferers such as post-surgical patients is much faster and more accurate as the representation of the potential of this muscle to contribute to back pain relief.

Personally, I have seen both the bracing method, which involves utilizing the external muscles such as the rectus abdominus and the obliques to hold the spine still during motion, as well as the drawing-in-maneuver, which involves activating the transverse abdominus for purposes of stabilization, do very well with back pain sufferers in supporting them on their path to freedom from pain. Both techniques work, and I feel the most appropriate approach is teaching both, thus allowing the back pain suffer more options, should they need them.
In this report, I'm going to focus on the primary technique for correcting anterior pelvic tilt, but it is important to understand, there is much more to correcting abdominal muscle dysfunction, particularly in the deeper layers, including the transverse abdominus. This is such a large topic that I have decided to create an entire DVD devoted simply to the correction of the deep abdominal wall.

However, you will get results with the exercise I will be presenting in this report. It assists in activating the abdominal muscle group correctly to improve your control over performing posterior pelvic tilt.

How to strengthen the abdominal muscles: Supine Pelvic Tilt

![Supine Pelvic Tilt]

**Keys to strengthening your abdominals:**

1. Place your hand under your spine at belly button level.
2. Gently perform a posterior pelvic tilt so that you feel your spine pressing down against your hand.
3. Be sure to avoid using your glutes or legs, only use your abdominals.

The Step-By-Step MASTER Formula For Correcting Anterior Pelvic Tilt:

It would be relatively stupid to think that simply giving you the corrective stretches and exercises for anterior pelvic tilt alone would do the job. As I mentioned earlier, one of the biggest mistakes in prescribing exercises and stretches is the lack of attention to detail, in both how to perform the exercises and stretches, as well as the correct loading parameters in which to perform them.

Loading parameters refer to the amount of sets repetitions, intensity and rest time in which to perform the movements. It is in these nuances, where most of the mistakes are made, as where the successes are found. So, below I have included a table to show you how to perform this program for success.
One last thing, as I mentioned earlier. It is incredibly critical that you perform the exercises and stretches exactly as I have outlined them. Failure to do so can easily provide lack of results. If you have performed the above routine correctly, you will notice an immediate 5-8 degree reduction in anterior pelvic tilt. If your back pain is related to anterior pelvic tilt, this routine may provide significant relief.

I suggest that you perform this routine only once per day to start with, of course this all depends on your unique body, workout experience, and the kind of back pain you have. Over time, as you feel comfortable, you may progress to performing this routine up to 3x per day, until you have achieved a neutral position in your pelvis.

I hope to have provided some excellent tools to help you on your journey toward correcting your posture, and hopefully allow you pain relief. As always, I am open to your feedback and appreciate knowing about your successes with this program.

I would love to hear from you, so send me an email letting me know how this program has helped you, or if you have questions you would like me to answer via my blog.

Sincerely,

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PS. If you want to learn more about my full DVD set on ending back pain, simply visit:
www.EndYourBackPainNow.com