Pelvic Floor Health

Introduction

The muscles of the pelvic floor play a key role in core stability, breathing and posture, as well as the support of the pelvic organs. Pelvic floor muscles work alongside other key muscles to enable proper support of the lower back, pelvis, bladder and bowel.

This guide was designed to help you understand more about pelvic floor muscles and the role they play in health conditions such as:

- Urinary and bowel incontinence
- Uterine, bladder and rectal prolapse
- Sexual dysfunction
- Pelvic pain
- Post-prostatectomy incontinence
- Constipation
- Overactive bladder
- Urinary hesitancy

What Is the Pelvic Floor?

The pelvic floor is made up of a number of layers of muscle tissue and associated ligaments that are anchored within the 'bowl' of the pelvis. These are connected to the pubic bone in the front, the tailbone in the back, between the sitting bones as well as to the hip muscles deep inside the pelvis. The muscular tissue and ligaments support all of the organs located in your pelvic region, including the bladder, small intestine, rectum, and, in women, the uterus and vagina.

The pelvic floor controls the passage of waste through the urethra and anus. Muscular bands called sphincters encircle the urethra and anus. When the pelvic floor muscles contract, the internal organs are lifted and the sphincters tighten around the openings. The sphincter contraction also prevents leaking of urine and stool. When the pelvic floor muscles relax, the sphincters open which enables urine and feces to be eliminated.

In addition to providing essential bladder and bowel control, pelvic floor muscles also contribute to sexual function. Strong pelvic floor muscles correlate with increased sexual sensation and arousal. Pelvic floor muscle spasm however, can result in pain during intercourse and orgasm, as well as causing constipation and bladder problems. The ability of the pelvic floor muscles to both contract as well as relax is critical to normal bowel, bladder and sexual function. Pelvic floor dysfunction, be it weakness, laxity or spasm, can have a significant impact on your overall health.

Causes of Pelvic Floor Dysfunction

Pelvic floor dysfunction can be caused by:

- Diminished muscle integrity due to weakness, tearing or cutting
- Abnormal nerve function
- Torn or avulsed fascia, which leaves an otherwise functional muscle unattached to the anchoring structures

The most common causes of injury to the pelvic floor muscles, nerves and fascia are pregnancy and childbirth. During pregnancy the growing baby puts extra pressure on the mother's pelvic floor, especially if she is expecting twins, triplets or other multiples. In preparation for delivery, the mother's body produces hormones which soften the ligaments and muscles to allow for the pelvic joints and soft tissue to widen, allowing the baby to descend through the birth canal.

Vaginal delivery can stretch and compress the pelvic floor structures. Other events that can increase the risk of pelvic injury include large babies, fast labor or pushing for more than 1.5 hours. However, simply being pregnant increases the risk of pelvic floor dysfunction, as women who have caesarean sections may also have pelvic floor problems.

Other factors that can contribute to pelvic floor dysfunction or make symptoms more apparent are:

- Obesity
- Chronic constipation
- Straining during urination or bowel movements
- Coughing associated with chronic bronchitis, asthma, other lungs disorders and smoking
- Heavy lifting
- Nerve or internal sphincter damage caused by prostate surgery
- Low estrogen due to hysterectomy or menopause

Since pelvic heaviness, bloating and urinary or bowel elimination changes may be a sign of other more serious health conditions, such as urogynecologic or prostate cancer, always consult your primary health care provider if you experience any of these symptoms.

Since you can't see your pelvic floor structures, you might not even realize that they have become stretched, weakened or injured until you notice other changes in your body or health. There are four categories of pelvic floor issues that may develop, which are outlined below. Please note that although treatment options are discussed in this article, your physiotherapist at Performance Health & Fitness Centre will work with you in a supportive and caring way to address your questions, concerns, and treatment options.

Urinary Incontinence

Urinary incontinence affects approximately 200 million people around the world – mostly women. In fact, 26% of women between the ages of 30 and 59 have problems with urine leakage [1]. Urinary urgency or urge incontinence can be caused by common triggers such as certain foods, drinks, and medications. It can also be caused by medical issues as common as a bladder infection, or due to more serious causes such as bladder or pelvic cancer.

The symptoms of urinary incontinence can range from leaking urine when you laugh, cough, sneeze or run to having a sudden need to urinate that is so overwhelming that you don't always make it to the bathroom in time. Some people find that they dribble urine, while others feel like they never really empty their bladder.

Many people with urinary incontinence tend to suffer in silence because they are too afraid or embarrassed to talk to their doctor. Many women with this problem also wrongly assume that the loss of bladder control is a normal part of aging or motherhood because it is so common. More than half of first-time moms and one in three women who have already had a baby experience some urinary leakage [2]. If urinary incontinence is affecting your daily life, you should definitely talk to a medical professional.

Your family doctor, nurse practitioner, urologist or gynecologist can do a number of tests to determine what type of incontinence you have and what might be causing it. This may include keeping a bladder diary for several days and having a urinalysis and/or blood tests.

Further specialized testing may be needed to provide more detailed information.

One potential, non-pharmaceutical intervention for urinary incontinence is physiotherapy. Performance Health & Fitness Centre can work with you to design a customized program that will help address weakness and spasm, regular bowel and bladder emptying as well as exercises to prevent further injury. Three common techniques that Performance Health & Fitness Centre uses to help improve bladder control are:

Exercises – Many people simply need to strengthen and re-educate their pelvic floor muscles to dramatically improve their symptoms. Gaining greater control over the muscles deep in your lower abdominals can also help improve pelvic floor muscle function. Rigid contractions of both the abdominal and pelvic floor muscles can actually make leaking or pain worse.

Biofeedback – Although many people have heard of Kegel exercises, more than half are not able to contract the right muscles based on verbal or written instructions [3]. Biofeedback can be used in combination with an exercise program to help make sure you are targeting the proper muscle groups. Biofeedback provides you information by a computer screen or a sound that tells you when you are contracting the correct muscles. This enables you to learn how to control the muscles during functional activities in sitting, standing and lying down. It also lets you know if you are fully allowing the muscles to relax. This is a crucial function especially with clients with pelvic pain.

Muscle Stimulation – Sometimes pelvic floor muscles are so weak that doing exercises (even with biofeedback) isn't enough. The muscles need to be physically reminded how to work properly. To do this your physiotherapist will teach you how pelvic floor muscle electrical stimulation can assist your muscles to remember how to contract. As the muscles start to remember how to work properly, your physiotherapist will add strengthening exercises into your treatment program.

Behavioral modifications are lifestyle and dietary changes that can significantly reduce your symptoms and improve your overall health. Combining behavioral modifications with pelvic floor strengthening techniques improves the effectiveness of your program. Your physiotherapist at Performance Health & Fitness Centre may include one or all of the following to help improve your control over your bladder:

Bladder Training – People with incontinence often get into the habit of going to the bathroom too often. There are a number of techniques you can use to gradually increase the amount of time between bathroom trips, including learning how to control the urge to urinate and learning how to empty your bladder more completely. A licensed physiotherapist can also give you advice on how to modify your daily habits to help you regain control of your bladder. Monitoring what and how much you drink, losing weight and doing regular exercise may also help reduce or eliminate your symptoms.

Relaxation Techniques – Stress, anxiety and tension only make bladder problems worse. Physiotherapists at Performance Health & Fitness Centre can instruct you in breathing, postural and relaxation techniques that can help put you back in control.

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Bowel Incontinence

Some people with pelvic floor injuries experience bowel incontinence which results in the inability to control the release of gas or feces. Like those with bladder problems, many people living with bowel or fecal incontinence (FI) never tell anyone, including their doctor. However, there are treatments available that are specifically designed to treat incontinence of gas or feces.

Symptoms

Bowel incontinence occurs when there is a sudden urge to empty the bowels or there is loss of control resulting in leakage of gas or stool (liquid or solid). Fecal urgency occurs when there is a sudden urge to empty the bowels, which can result in not making it to the bathroom in time. Bowel incontinence can be a source of anxiety, embarrassment, and frustration, and frequently results in isolation and avoidance of social situations and community mobility.

Diagnosis

Even though you might feel uncomfortable discussing bowel incontinence with your doctor, it is important to seek medical attention. Your doctor will probably begin by asking you a series of questions concerning when and how often you are unable to control your bowels. After that, your doctor will examine your anus and the area between your anus and genitals to see if there is any physical cause for your problem. It may be helpful to undergo more specialized tests, such as an MRI or CT scan to check your spine, before you doctor can determine a specific reason for the leakage and then recommend a treatment customized for your condition.

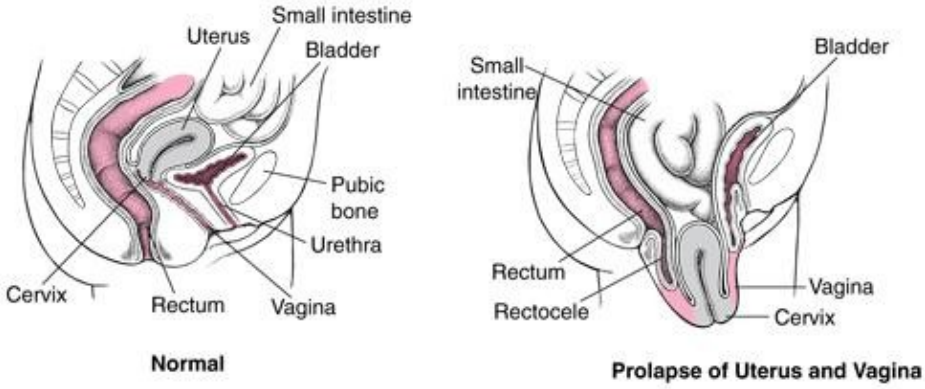
Treatment

If your incontinence issues are caused by pelvic floor weakness, spasm or injury, your doctor should recommend physiotherapy. Your first appointment at Performance Health & Fitness Centre will include an initial assessment and examination, as well as plenty of time for you to ask questions. Our priority is that you feel safe and comfortable at your appointments and we encourage you to bring your spouse, partner or friend with you to your appointments if that would make you feel more comfortable. Your customized treatment program will be based on your physiotherapy evaluation. This may include:

- Pelvic floor exercises
- Biofeedback
- Muscle stimulation
- Bowel retraining
- Relaxation techniques
- Lifestyle changes, including diet, exercise and stress management

Pelvic Organ Prolapse

In women, if the pelvic floor muscles and ligaments become stretched and injured, the bladder, rectum or uterus may drop down into the vaginal walls. This is called pelvic organ prolapse. Depending on how bad the prolapse is, the uterus may just bulge into the top part of the vagina or it could stick all of the way out of the opening.



Source: http://www.merckmanuals.com/home/sec22/ch249/ch249a.html

Symptoms

Uterine prolapse can cause a range of symptoms, depending on how far the uterus is protruding into the vagina. Common symptoms include:

- A distinct lump or bulge in the vagina
- A constant ache in the vagina
- Feelings of heaviness or pressure in the vaginal area
- Abnormal tissue sticking out of the vagina
- Persistent ache in the lower back or over the tailbone
- Problems urinating
- Frequent urinary tract infections
- Bleeding or vaginal discharge (more than normal)
- Pain during sex

Some women find that their symptoms are worse when they are standing up, straining or coughing and tend to disappear when they are lying down or relaxing. Very mild cases of uterine prolapse may cause no symptoms at all until the woman gets older.

Diagnosis

To check to see if your uterus has prolapsed, your doctor will do a pelvic exam. To do this, he or she will insert a speculum to spread apart the walls of your vagina. During the examination, your doctor may ask you to stand up, bear down on your pelvic floor muscles (like you do when you are having a bowel movement) or cough. All of these activities put more pressure on your pelvis and make any abnormalities or disorders more obvious.

Based on the result of the exam, your doctor will be able to diagnose and categorize your prolapse. The three types of uterine prolapse are:

- First degree (mild) – the bottom of the uterus, called the cervix, protrudes into the top of the vagina
- Second degree (moderate) – the cervix is near the opening of the vagina
- Third degree (severe) – the entire uterus protrudes out of the vagina

Treatment

In mild to moderate cases, pelvic floor exercises can correct uterine prolapse. These are the same exercises used to treat incontinence issues. Because some people have trouble contracting the correct muscles, a physiotherapist at Performance Health & Fitness Centre will be able to help you get the most out of these exercises. Your physiotherapist may also recommend:

- Inserting a cone-shaped device in your vagina to help you focus on contracting the correct muscle
- Biofeedback therapy
- Electrical stimulation to ensure the correct muscles contract

In severe cases, pelvic floor exercises will probably not be enough to pull your uterus back into its normal location. As a result, your doctor may recommend that you use a vaginal pessary. This doughnut-shaped device is inserted into the vagina to help prop up the cervix and uterus. This is only a short-term solution though, and surgery may be needed to completely repair the damage.

Sexual Dysfunction

Women

The pelvic floor muscles play an important role in a woman's sexual pleasure. Purposely squeezing pelvic floor muscles contribute to sexual sensation and arousal. Also, weak pelvic floor muscles can have a devastating affect on a woman's libido. One study that looked at 301 women over the age of 40 linked pelvic floor symptoms to low sexual arousal, infrequent orgasms and painful intercourse [4]. Weakened or damaged pelvic floor muscles can also reduce vaginal sensation.

One of the easiest ways to increase your libido is to tighten up your pelvic floor muscles through exercise. Research has shown that pelvic floor exercises increase the amount of blood to the pelvic region, increasing arousal and vaginal sensation. The physiotherapists at Performance Health & Fitness Centre can help you make sure that you are targeting the right muscle groups.

Men

Strong pelvic floor muscles are also important for male sexual health, as they are essential for gaining and sustaining an erection. As a result, weak pelvic floor muscles are a major contributing factor for erectile dysfunction. This means that men may want to try doing pelvic floor exercises before taking medications like Viagra and Cialis.

According to a 2004 clinical study, pelvic floor exercises and biofeedback were more effective than lifestyle changes for erectile dysfunction [5]. Four out of ten men who participated in the study said their sexual

performance was back to normal after six months of doing regular pelvic floor exercises. A further 35% said their performance had improved somewhat.

Summary

Call Performance Health & Fitness Centre to Make an Appointment

If everyone knew how to tone their pelvic floor muscles then no one would ever have to suffer from the negative effects this type of muscle weakness can cause. If you are dealing with any of these conditions or hope to prevent them from ever occurring, the professional physiotherapists at Performance Health & Fitness Centre would be happy to talk to you. They will also be able to answer any questions you might have about whether physiotherapy is right for you.

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