



# INCLUSIVE GUIDE TO PELVIC PAIN

BY DR. MONICA VANDERVOORT PT, DPT

**SUMMUS**  
REHABILITATION



Dear Patients,

Thank you for downloading Summus Rehabilitation's Inclusive Guide to Pelvic Pain.

After reading it, you will better understand the conditions that could be causing your pain or dysfunction and will be one step closer to living a pain-free life.

Often when patients walk into our clinic they have been living with chronic pain, urine leakage, stool leakage, or other issues involving the low back, abdominal, and pelvic region. This delay in receiving the proper care can be for a variety of reasons:

- Patients have seen several providers and still have not been able to find relief.
- Patients may not realize that help exists for their specific condition.
- Patients may have normalized their condition for so long and finally their symptoms have reached a point that the person decides to reach out for help.
- Patients may have their symptoms dismissed by the medical provider.

While more and more people are learning about pelvic health, a stigma still exists surrounding the bladder, bowels, and sexual health. Even though more people are learning about this, there is still a lot of inaccurate information circling the internet. **In this guide, we will cover what pelvic pain is, the causes of pelvic pain and other common disorders that can present with pelvic pain, and treatments for pelvic pain.**

**Summus Rehabilitation empowers and encourages those that not only suffer from pelvic pain, but other widespread pain, to make changes to return to the activities that bring you happiness and the life you want.** Knowledge is power and the more you know about your body and treatment options, the more you can advocate for yourself to get the proper care to address your pain. By sharing knowledge of the pelvic floor with you, we hope you will appreciate the inner workings of this under-appreciated but essential part of our bodies. We also hope that by understanding the pelvic floor a little better, you will seek out a provider that considers a holistic approach to treatment. It is possible to live a pain free life and manage your symptoms.

**Summus Rehabilitation is an inclusive private practice physical therapy clinic.** For the purpose of this guide, we will refer to specific organs and body parts as much as possible. Additionally, specific statistics and literature are cited in this guide and those data points may reference 'men' and 'women' or 'female' and 'male.' For these instances, people with a vagina, uterus, and/or ovaries will be referred to as female and those with a penis and prostate will be referred to as male. The terms male and female seek to identify sex organs and sex features as opposed to identifying a gender. We want to recognize and acknowledge that not all people reading this that identify as 'men' may have a penis or prostate and likewise, not all people that identify as 'women' have a vagina, uterus, and/or ovaries. The guide focuses on the organs themselves and causes of pain for all people that may experience symptoms due to their specific anatomy.

We hope this guide provides you answers. Remember, we are here for you!

Warmly,  
Monica Vandervoort PT, DPT  
Board Certified Women's Health Clinical Specialist

# TABLE OF CONTENTS

<b>NOTE FROM THE AUTHOR</b>	<b>2</b>
<b>WHAT IS PELVIC PAIN?</b>	<b>6</b>
<b>ANATOMY OF THE PELVIS</b>	<b>8</b>
<b>WHY DO I HAVE PELVIC PAIN?</b>	<b>10</b>
<b>POSSIBLE CAUSES OF PELVIC PAIN</b>	<b>12</b>
01. INJURY TO THE PELVIC FLOOR	12
02. EMOTIONAL AND MENTAL STRESS	14
03. ENDOMETRIOSIS	16
04. UTERINE FIBROIDS	17
05. PELVIC INFLAMMATORY DISEASE	18
06. PROSTATITIS	19
07. PAINFUL BLADDER SYNDROME/INTERSTITIAL CYSTITIS	19
08. GASTROINTESTINAL (BOWEL) CAUSES	20
09. TRANSMASCULINE PAIN	22
10. PAIN POST GENDER AFFIRMATION SURGERY	23
<b>LET'S TALK MYTHS</b>	<b>25</b>
<b>TREATMENTS FOR PELVIC PAIN</b>	<b>28</b>
01. SURGERY	28
02. MEDICATION	30
03. IMPORTANCE OF FLUID INTAKE AND DIET	30
04. MOVEMENT IS MEDICINE	32
05. SLOW BUT STEADY	33
<b>WHEN TO SEEK THE KNOWLEDGE OF A PELVIC HEALTH PHYSICAL THERAPIST</b>	<b>35</b>
<b>CONTACT</b>	<b>38</b>
<b>REFERENCES</b>	<b>40</b>



**It is possible to  
live a pain free life  
and manage your  
symptoms.**

*We want to educate you on your  
symptoms and give you the power to  
make changes.*

# WHAT IS PELVIC PAIN?

Those of you that may be reading this guide may already have pelvic pain or may know someone with pelvic pain and be familiar with the symptoms. We want to start this guide by explaining pelvic pain and the anatomy surrounding the pelvis. Knowledge of pelvic pain and pelvic anatomy can help you understand treatment options for this region of the body.

Pelvic pain, specifically chronic or persistent pelvic pain, is characterized as pain that persists for greater than three (3) months. This pain persists beyond normal tissue healing time in the pelvic region.

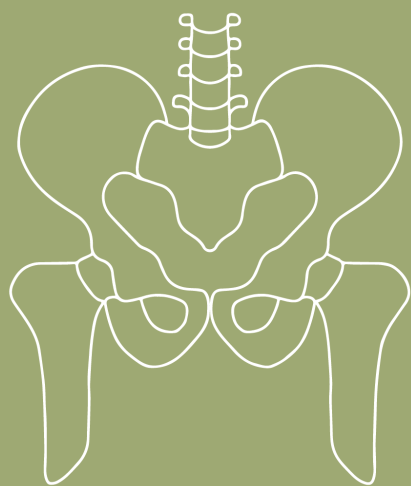
When we refer to pelvic pain, it can mean pain in the abdomen, the low back, pain over the bladder and/or before, during, or after urination. Pain can also manifest with sexual penetration, speculum insertion, orgasm, and/or ejaculation. The pain can be constant, or it can come and go, and pain usually persists for one month or more and does not resolve.

Chronic pelvic pain is non-cyclical and perceived to be in structures of the pelvis. Chronic pain in the pelvis contributes to anxiety, depression, sleep disturbances, decreased and poor quality of life, and possible disability. Pain can interfere with recreational activities, exercise, work, social activities, and intimacy. Pelvic pain is associated with symptoms that include, but are not necessarily limited to:

- Pain with intercourse or intimacy
- Urinary urgency/frequency/leakage
- Constipation
- Rectal pain
- Abdominal pain
- Low back/hip pain
- Burning or pain in the clitoris or vulva or in the penis

***PELVIC PAIN CAN AFFECT ALL PEOPLE, AND IT IS STILL POORLY IDENTIFIED, DIAGNOSED, AND TREATED.***

Fortunately, more research is focusing on patients who experience pelvic pain and associated symptoms to improve their quality of life.



# ANATOMY OF THE PELVIS

Before we dive into reasons for pelvic pain and treatment options, we need to discuss:

**The anatomy of the pelvis with a focus on the pelvic floor muscles.**

**Who has a pelvic floor?**

**What is the pelvic floor?**

**How does the pelvic floor relate to bladder and bowel habits and sexual function?**

It is important to note that *every person* has a pelvic floor and while the muscles are oriented differently depending upon your anatomy, they all participate in the bowel, bladder, and sexual function that we will discuss below.

The pelvis consists of bones and small joints that support and protect the pelvic organs. The pelvis also connects to the spine and to the legs. Muscles from the back, abdomen, and lower body connect onto the bones of the pelvis and assist in movement and distribution of forces at the pelvis. The pelvis houses the bladder, uterus and vagina, prostate, and the rectum. Overall, the bones, muscles, and connective tissue that make up the pelvis help to disperse forces around the trunk and decrease forces into upper and lower body joints. It is an intersection of many muscles and bones that help with everyday movement such as walking, lifting, bending, bowel and bladder continence, etc.

At the bottom of the pelvis are a group of specialized and unique muscles called the pelvic floor muscles; think of them like a hammock at the bottom of the pelvis. The pelvic floor muscles attach from the pubic bone, to the tailbone and to each pelvic sit bone (ischial tuberosity). These muscles are important because they hold up and support all of your organs. The pelvic floor muscles also wrap around the urethra, the clitoris and vagina or penis, and rectum, assisting with sexual function and bladder and bowel continence. These muscles allow you to urinate, have a bowel movement, participate in sexual activity, and have a role in reproduction.





## WHY DO I HAVE PELVIC PAIN?

This is a question that can have a simple answer or a complex one. Understanding the things that can cause pelvic pain allows you to address them in a calm, focused manner.

You are not alone, as 15% of cis-women and 2-6% of cis-men suffer from pelvic pain. The prevalence of pelvic pain in the Transgender population is unknown at this time, however, more literature is focusing on this population. Pelvic pain is underdiagnosed in all people; however, it is even more underdiagnosed in men compared with women. It is difficult to pinpoint the exact cause of pelvic pain, but what we do know is that pelvic pain arises from several factors that we will discuss next.





It is even more important to highlight that pelvic pain is best treated with a team of healthcare providers that communicate with you and the other providers involved in your care. This team can include a physician or physicians (with a specialty in gynecology, urology, urogynecology, psychiatry, and gastroenterology), a physical therapist, a dietician/nutritionist, a nurse practitioner, an acupuncturist, and a psychiatrist and/or mental health therapist.

This may seem like an overwhelming list, however, as you begin your healing journey, you will find that one or a few of these providers will work together with you to address your systems and help restore your health and fitness. Addressing these symptoms with a multimodal approach often yields the best results.

# POSSIBLE CAUSES OF PELVIC PAIN

## 01. INJURY TO THE PELVIC FLOOR

Pain that lasts from the time of an incident to about one month is called acute pain. Acute pain is usually caused by a specific incident and the muscles or tissue surrounding the pelvis have been damaged. This can be a result of childbirth (either cesarean section or tearing/episiotomy during vaginal delivery), abdominal or pelvic surgery, or from a trauma such as a car accident or broken bone in the pelvic region. Injury to the pelvic floor can also occur during nonconsensual sexual penetration. (For the purpose of this guide, any injury to the pelvic floor will be referred to as an "incident"). Usually, after the incident, the body will heal, the muscle and tissue will repair itself, and the pain will disappear.



However, in some occasions, pain can persist even after the body has healed. This happens because the nerves in the area that carry pain messages to the brain are more sensitive after the injury than before it and the nerves continue to perceive pain even when an injury and tissue damage is no longer present. As a result, pain can persist beyond the normal healing time. In response to the pain that we perceive, our muscles will attempt to guard and protect against the pain which in turn contributes to continued and persistent pain. When muscles are injured from particular incidences, we have a reduced ability to coordinate the muscles and an overall decreased awareness of that body part. The nerves in the area of the injury may become hypersensitive and hyperreactive causing pain from a previously nonpainful stimuli.

Here is an example of an increased or hypersensitive nervous system. Say for example you were doing some yardwork and you scraped your elbow on the fence. After scraping your elbow you find it is a bit more sensitive and maybe even painful for the first couple days or one to two weeks while it is healing. Once the scrape is healed, you are able to resume activity with no issues. You also notice when you touch your elbow after it has healed, it feels the same as it did before scraping it. This is a health response to an injury. Now let's say, the scrape is healed after 2 weeks, but you still notice increased sensitivity over the area where the scrape was. It feels uncomfortable to touch and it bothers you to move the elbow. This response to healing is abnormal and as a result, the nervous system is more sensitive than it was before. While initially this subconscious response is protective, it is actually harmful when it occurs beyond the normal healing time.

If you are more sensitive after an injury and pain becomes persistent, then it is important to regain control over the muscles, bring awareness to the body part that was injured, and learn to coordinate the muscles again. While retraining the body to coordinate again and move better, we must also train the hypersensitive nerves to calm down and become less reactive because the injury is no longer a "threat" to the body.



Often, physical trauma is associated with a psychological component, as well. The mind and body are so interconnected that it is difficult to dissociate between the two parts. While patients pursue physical therapy for pain, it is recommended that patients participate in mental health therapy simultaneously. Just like muscles and bones are systems that we need to take care of, the brain is a system that needs care as well. In fact, it is arguably one of the most important systems that needs care and this is why psychologists, psychiatrists, and mental health therapists exist. These professionals help treat the brain and thus pain. The best outcomes for pelvic pain result from caring for both body (physical) and brain (psychological). At Summus Rehabilitation, we work closely with other providers to ensure patients receive the best care during recovery.



## **02. EMOTIONAL AND MENTAL STRESS**

When we feel stressed, our body will tense up and our muscles will contract. Sometimes this happens subtly or sometimes it can happen more drastically depending on the situation and for how long the stress is endured. The pelvic floor muscles are no exception to either dramatic or subtle reactions to stress.

Several of us are used to living fast paced lives and relaxing can be difficult. Relaxation is important for many different systems in the body, including muscles. When we are stressed and active and we do not take the time to relax, our muscles can develop trigger points and painful areas. The pelvic floor muscles are no different. As mentioned above, the pelvic floor muscles should move up and down (contract, relax, and lengthen). When we are stressed, our pelvic floor muscles have difficulty relaxing and trigger points can develop in this group of muscles, as well.

The body is powerful and there is a strong connection between our brain and our body, and we have to be mindful of this.

The heightened state of stress that leads to tension can become our new normal. At first, we may not notice the stress and tension, however, as time goes on, it becomes more difficult to relax those muscles and pain develops. Unfortunately, pain caused by muscle tension does not show up on X-Rays, CT scans, MRIs, etc. and thus, if scans do not show any disease or dysfunction, it is likely that a muscle or group of muscles is causing the symptoms. This is frustrating because the pain is very present, yet the source of pain cannot be seen. If tests and scans are normal, this indicates the problem is in the muscles and nerves, thus your provider should refer you to a physical therapist specializing in pelvic health.

When we recognize that our pelvic floor is tense and contracted along with other areas of our body, we have to learn to let it relax. This is done through deep breathing and awareness of pelvic floor muscle coordination. Your physical therapist will help you learn to coordinate and relax or lengthen the pelvic floor in combination with breathing. Learning to relax the pelvic floor can improve pain; constipation; urinary frequency and urgency; as well as assist with consistency of bowel movements.

## ***WE HAVE TO RECONNECT AND DEVELOP A POSITIVE RELATIONSHIP WITH OUR PELVIC FLOOR.***

Trauma and stress manifesting as pain are frustrating because it is difficult for health care providers to diagnose, and it takes time, work, and mindfulness to heal.

### 03. ENDOMETRIOSIS

#### ABOUT

Endometriosis occurs when uterine cells and tissue grow outside of the uterus and around the surrounding pelvic organs. When the endometrial cells grow outside of the uterus, they cause lesions and can affect the uterus, bladder, bowels, and intestines. Endometriosis affects people with a uterus during their reproductive years, between ages 15 and 49.

#### TREATMENT

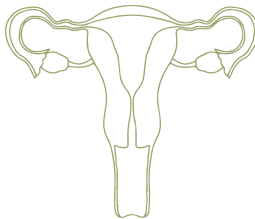
Surgery used to be the gold standard of diagnosis and treatment, however, surgery is no longer recommended to diagnose or remove endometriosis because it grows back, on average, between 10 months and 2 years. In some cases, surgery can increase scar tissue and adhesions, causing more pain and discomfort in the pelvic region. Currently, best practice for endometriosis is conservative management through medication, non-steroidal anti-inflammatory drugs (NSAIDs), hormone suppression in the form of birth control, and physical therapy. In some situations, laparoscopic surgery is indicated to remove the endometrial tissue to facilitate fertility, however, this is best discussed with your medical doctor to determine the best course of action for you. Because not all physicians/gynecologists specialize in the diagnosis of endometriosis, it is always recommended to seek out two separate opinions to ensure you have the best treatment option for you, your goals, and your lifestyle. It's important that endometriosis is diagnosed early so patients can receive treatment earlier and decrease other conditions and diseases that can accompany it.



## 04. UTERINE FIBROIDS

### ABOUT

Uterine fibroids are harmless (benign) tumors that grow in the uterus. Fibroids grow because of two main hormones: estrogen and progesterone. Because hormones promote fibroid growth, this usually affects people during their reproductive years (from puberty until menopause). Oftentimes, fibroids do not cause pain or symptoms, but in some cases they can.



### TREATMENT

Treatment for fibroids includes birth control or hormone suppression therapy, surgery, uterine artery embolization, and in significant situations, a hysterectomy. Uterine artery embolization is a procedure that stops or limits blood flow to the fibroid to stop it from growing. Fibroids can be removed through the vagina or through the abdomen, depending upon their size and the number of fibroids present. A hysterectomy is the removal of the uterus; most hysterectomies are partial, meaning the surgeon will leave the ovaries. Once the fibroid(s) are removed, patients can pursue physical therapy to decrease any pain, symptoms, and scar tissue adhesions. Scar tissue may affect fertility as well as the bowel and bladder, thus physical therapy can help break up and reduce post-surgery scar tissue.

## 05. PELVIC INFLAMMATORY DISEASE

### ABOUT

Pelvic Inflammatory Disease (PID) affects the pelvic organs, usually the uterus and ovaries, and can be caused by a variety of diseases. Diseases such as sexually transmitted infections, bacterial vaginosis, and tuberculosis can cause persistent inflammation in the pelvis and lead to pelvic pain. Inflammation is the body's normal response to fighting infection, however, if inflammation continues beyond what is deemed normal, PID can develop and harm the pelvic organs, resulting in pain.

### TREATMENT

Treatments include medication and antibiotics for the infection. If the infection has cleared up and pain persists, a referral to a physical therapist is necessary. Physical therapy can help relax the muscles that may still be guarding to protect the body against an infection that is no longer present.



## 06. PROSTATITIS

Chronic Prostatitis is persistent pain located at the tip of the penis, scrotum, groin, and lower abdomen. It can be worse with urinating or ejaculation. Often, when patients present with this diagnosis, they are tested for an infection of the prostate and for an STI. In most situations, even in the absence of an infection, patients are given antibiotics for these symptoms. If the antibiotics fail to help, then the condition is likely nonbacterial Prostatitis and the patient should be promptly referred to physical therapy to address pain and prevent it from lingering.

Even if bacteria are present, pain can still persist after antibiotics and negative culture tests, thus patients will benefit from a physical therapy referral. Chronic nonbacterial prostatitis can be caused from a stress event and impact the muscles and nervous system.

Often with pain, the muscles are guarding and spasming causing pain, thus physical therapy can help reduce muscle spasm and overactivity with specific manual techniques and exercises to stretch and relax the muscles.



## 07. PAINFUL BLADDER SYNDROME

Painful Bladder Syndrome (PBS), formally known as Interstitial Cystitis (IC), can affect any person. PBS/IC is associated with changes in the lining of the bladder and is not associated with an infection. Symptoms can present as lower abdominal pressure, pelvic pain, urinary urgency/frequency, and pain with bladder filling and urination. Patients will sometimes have brief pain relief immediately following urination.

Like other diagnoses mentioned in this book, PBS/IC is a complex disease with multiple factors, however, we do not know exactly why PBS/IC affects some people and not others. PBS/IC is treated with medications, medical procedures, and physical therapy. While physical therapy cannot change what is happening inside the bladder, it can assist in how the muscles and nerves surrounding the bladder respond to changes in the bladder. Through relaxation techniques, stretching, exercises, and incorporating helpful fluid and diet changes, patients can find relief for their symptoms.

## **08. GASTROINTESTINAL (BOWEL) CAUSES**

### **Irritable Bowel Syndrome (IBS)**

Irritable Bowel Syndrome (IBS) is a disorder that affects the gut/gastrointestinal tract. Symptoms usually include bloating, abdominal pain, nausea, pain with bowel movements, and changes in bowel habits that usually alternate between loose (i.e., diarrhea) and/or hard stools (i.e., constipation). IBS is affected by the gut's response to stress, diet, infections, and the bacteria that is normally in the gut. Our gut and intestines house "good" bacteria that help to digest our food. When we have an imbalance in the "good" bacteria combined with increased stress, an infection elsewhere in the body, and/or poor diet, this causes discomfort/pain in the abdomen and with bowel movements. This diagnosis can affect 10-15% of the population worldwide. Physical therapy can help with IBS by educating on fluid intake, dietary habits, how to properly sit on the toilet, exercises to improve abdominal and pelvic pain, and manual therapy and massage techniques to abdomen and surrounding tissue. If we can control how the body responds to IBS, then we can help mitigate and eliminate pain long term.

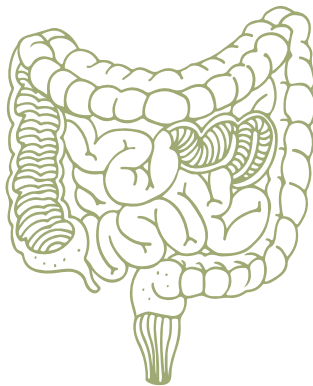
## Constipation

Chronic constipation is characterized as lasting greater than three (3) months and has two or more of the following symptoms:

- Patients have fewer than three (3) bowel movements per week,
- Inability to completely empty bowels,
- Need assistance with evacuation either with medication or using their fingers, and/or,
- The person finds themselves straining/pushing to have a bowel movement.

Constipation affects 15% of people and while it is more common in adult females due to hormones, it affects adult males and children, as well. This straining and constant pressure can harm the pelvic floor muscles. Constipation is also associated with urinary leakage and pelvic pain.

Pelvic floor physical therapy can help with constipation through education on water intake, dietary changes, gut health, how to sit on the toilet, exercises, and manual therapy/massage techniques to improve stool consistency and gut motility. As physical therapists, our goal is for you to learn about your bowels and rely less on supplements such as Immodium, Metamucil, MiraLAX, and other over the counter supplements to have or control a normal bowel movement.



## 09. TESTOSTERONE-INDUCED PAIN

Transmasculine patients tend to be at the highest risk of testosterone-induced dyspareunia, vaginitis, and cervicitis due to the higher doses of testosterone. The increase in testosterone can result in an estrogen deficiency resulting in a change in vaginal pH and vaginal atrophy that causes a decline in tissue resilience, decline in skin barrier function, and increased susceptibility to infection. Furthermore, thinner vaginal tissues can cause increased pain from friction and thus the person may develop dyspareunia. Dyspareunia is defined as painful penetration whether it is from fingers, penial, or a dildo. A study found that 20% of transmen undergoing testosterone therapy had a hysterectomy due to pain and another 22% had to stop testosterone therapy due to pelvic, vaginal, and/or orgasmic pain.

Treatment for reducing pain involves localized vaginal estrogen cream to improve skin and tissue integrity of the vulva and vagina as well as use of lubrication during penetrative intimacy. Lubrication should be free of silicone, glycerine, and other preservatives, as these ingredients can increase discomfort and dryness of vaginal and vulvar tissue. Other non-surgical treatments include physical therapy and use of progesterone IUD. It is important to note that estrogen cream and a hormonal IUD are meant to serve the local tissues and have little effect systemically.

## **10. PAIN POST GENDER AFFIRMATION SURGERY**

Some studies report 1 in 4 transgender and non-binary people undergo gender affirmation surgery. After surgery, postoperative pain, swelling, and discomfort/tenderness is normal, just as with any other surgery. The pelvic floor muscles and nerves are the same regardless of gender, however, they are oriented differently.

With male to female transitions, it is important to participate in dilation therapy days after surgery to maintain the newly formed vagina. After surgery, your body will begin to build up scar tissue and the neo vagina may begin to contract and shrink, thus use of dilators is important. It is important to utilize pelvic health PT to safely guide you through the process of dilators use as well as stretches and other techniques to promote tissue healing and decrease pain/discomfort weeks/days/months after surgery.

With female to male transitions, the penis is formed with either vaginal tissue or tissue from elsewhere in the body (often thigh or forearm). Thus, scar mobilization and tissue management are important at both the site of the neopenis and at the site from which they used skin from. If pain persists more than 6 weeks post-surgery, it is recommended you talk with your physician and seek out a physical therapist specializing in pelvic health.

“

# ***KNOWLEDGE IS POWER.***

The more you know about your body and treatment options, the more you can advocate for yourself to get the proper care to address your pain.



# LET'S TALK ABOUT MYTHS

## THE REALITY OF THE PELVIC FLOOR

It's both easy and hard to find quality health information. The internet, social media, and television can sometimes provide useful information while other times, can oversimplify information or provide biased or misinformation. It is important to receive information from reliable sources and break down the myths! The pelvic floor is an area of the body that has been underrepresented for so many years and old information is no longer accurate information.

### MYTH #1

#### **THE MORE KEGELS I DO, THE BETTER AND STRONGER MY PELVIC FLOOR WILL BE.**

This is a myth! First, let's discuss the word, Kegel(s). Kegel(s) are a term for pelvic floor muscle contractions. Current research is moving away from using the term Kegels, and instead using the term pelvic floor muscle contraction. And yes, while a pelvic floor muscle contraction may help reduce incontinence, it is not the only thing that can help with incontinence. In fact, most people perform Kegels or a pelvic floor muscle contraction incorrectly. Second, contracting a muscle that is already irritated and cannot relax on its own or voluntarily can do more harm than good. Thus, it is important to coordinate pelvic floor treatment with a pelvic health specialist to make sure the pelvic floor muscles cannot only contract properly, but that they can relax and lengthen/stretch properly too!

## MYTH #2

### **THE LESS WATER I DRINK, THE LESS I HAVE TO GO TO THE BATHROOM.**

This is a myth! The less water we drink, the more concentrated our urine becomes and more concentrated urine can irritate the lining of the bladder - causing more urinary urgency. Thus, we want to drink more water to dilute our urine and reduce our urge to use the bathroom. Also, the more frequently we urinate, the more we encourage the bladder to hold less fluid and become smaller. A smaller bladder means the bladder has reduced capacity to hold urine. As the bladder fills with urine, it expands. When it is time to urinate (normally, 2-4 hours later), the bladder contracts to empty the fluid. If we use the bathroom too often, then the bladder does not fully expand, and it becomes smaller overtime. If the bladder has reduced capacity to hold urine, we need to retrain the bladder to hold more urine. It is a balance of using the bathroom when we need to, but also not going too often!

If you are experiencing PBS/IC it may be difficult to hold urine. We recommend seeking a healthcare provider and/or physical therapist to assist with decreasing pain as well as helping you develop bladder habits that reduce urinary frequency without increasing pain.

## MYTH #3

### **USING LUBRICATION WILL MAKE YOUR PAIN WITH SEX AWAY.**

This is a myth! While lubrication can be helpful in reducing friction inside the vagina and/or anus, it may not take the pain away. Pain with intercourse is often associated with muscles that are shortened, irritated, and have developed trigger points. Learning to coordinate the muscles and practice exercises to help the pelvic floor muscles relax under supervision of a physical

therapist can help eliminate pain with intimacy and intercourse/penetration.

It is true that some people may benefit from a vaginal moisturizer or an estrogen cream prescribed from your physician to improve vaginal tissue integrity that ultimately can decrease pain. This is a great conversation to have with your physical therapist and medical doctor.

#### MYTH #4

#### **DOUCHING IS GOOD FOR THE VAGINA.**

This is a myth! Douching can irritate the vagina and disrupt the natural pH balance of the vaginal fluid. The vagina is awesome because it is self-cleansing and does not need the aid of soaps to keep it clean. Only douche if instructed by your physician and aside from lubricant, only use products recommended by your physician and be sure to follow the instructions for application to prevent disrupting the balance of the vagina. It is recommended to wash the labia and vulva (external genitals) with warm water and pat dry with a towel. You can also use your fingers to wash between the folds with warm water. This is also true when washing the penis.

#### MYTH #5

#### **ONLY FEMALES HAVE PELVIC FLOORS.**

This is not true! Every person has pelvic floor muscles. While the muscles may be oriented slightly differently, every person has the same muscles that participate in normal bladder, bowel, and sexual function. It is true that pelvic pain and disorders affect patients with a uterus, ovaries, and vagina more than those with a penis and prostate, however, physical therapy can help everyone who is experiencing pelvic pain.

# TREATMENTS FOR PELVIC PAIN


Now that we have discussed the anatomy of the pelvis and pelvic pain and its causes, let's discuss the various treatments available for pelvic pain and how they can help.

## 01. SURGERY

Surgery absolutely has a time and a place for healing. However, surgery is not always the best solution for pelvic pain. As we discussed above, pelvic pain is oftentimes not seen on imaging because it is a dysfunction in the muscle. If this is the case, physical therapy will help your body achieve balance that assists with eliminating pain. Other diagnoses, such as PBS/IC and endometriosis may warrant surgery, although surgery is no longer the first or even second line of treatment for pelvic pain diagnoses. Thus, it is important to speak with a healthcare provider to discuss medications and procedures that assist in decreasing pain prior to surgery. Should a healthcare provider recommend surgery, it is always best to seek a second opinion and make an informed decision about whether the procedure is right for you.

As providers we want you to attempt non-operative management to improve symptoms and underlying causes first. Non-operative management typically means using physical therapy, medication, and changing some lifestyle habits, first, before turning to surgery. Surgery involves extensive recovery and affects multiple systems in the





body even if it seems like a “simple” or “quick” procedure. It is important to be mindful that therapy post-surgery is also important in regaining function in a pain free manner.

If the cause of the pain is not life threatening, we want to make sure we attempt all non-operative options first, before turning to surgery. If something is harmful to you or will grow to be harmful, then we absolutely want to remove the source of the problem and focus on recovery afterward.

## **02. MEDICATION**

Medication can absolutely help these conditions, and oftentimes medication is necessary to supplement healing. It is important to note that medication and physical therapy, counseling, and behavioral changes often help patients achieve the best outcomes. For example, a patient may use pain medication such as Gabapentin and/or vaginal or rectal suppositories to control pain in the beginning. Then as physical therapy, counseling, and dietary changes begin, the goal is to decrease reliance on the medication and potentially eliminate the need for it altogether.

It is especially important that you discuss the medications' effect on your body with your physician. We say this because medication is advertised on television and in various media outlets and we want you, as the patient, to be a smart consumer. While commercials may seem like the medication cures all, this may not always be the case.

Again, medication is important in the course of treatment of pelvic pain and its effects are even better when combined with interdisciplinary care as discussed above.

## **03. IMPORTANCE OF FLUID INTAKE AND DIET**

Did you know that 75% of our body is made up of water? Water intake is important for our overall health and wellness. Proper hydration helps with improved physical performance, memory, gut health and function, high blood pressure, diabetes, improved ability to regulate body temperature, and so much more.

Dehydration can contribute to headaches, constipation, urinary tract infections, and kidney stones. Studies show that water intake of 1.5L (50 ounces) per day reduces the chance for urinary tract infections. It is important to note that water needs to be closely monitored in patients with heart disease and kidney disease. Water intake is dependent upon how much water is in food, however, it is recommended that people drink 48-64 ounces of water per day or drink half of their body weight in ounces.

Fluids that may be more irritating to your body include, coffee, tea, alcohol, juice, and pop/soda. These drinks are irritating to

the bladder and contain increased sugar content (i.e., juice and alcohol) and can promote inflammation throughout the gut and the rest of the body. Therefore, it is important to minimize how much of these fluids are ingested throughout the day.

The human body uses six categories of nutrients from food: carbohydrates, fat, protein, fiber, minerals, and vitamins. In the United States, it is easy to consume foods with processed meat, as well as foods high in sugar and refined grains, and consume fewer fruits and vegetables. This combination of foods (more processed foods, fewer fresh foods) results in increased pro-inflammatory foods leading to more sensitive nerves that process pain. Pro-inflammatory foods perpetuate nerve sensitivity, as discussed above, and can contribute to chronic pain. The consumption of less nutritious foods upsets the gut bacteria and reduces the amount of nutrients absorbed by the body. It can also result in a reduced anti-inflammatory defense and response, causing a weakened immune system.

Supplementing certain nutrients and eating a balanced diet with fresh food can result in improved gut health and alter and improve chronic pelvic pain, low back pain, IBS, rheumatoid arthritis, depression, and anxiety.

### ***BEING MINDFUL OF WHAT YOU EAT CAN ASSIST IN ALLEVIATING PAIN.***

It is best to shop at the outer rim of the grocery store for fresh produce, and season your food with spices and fresh herbs as opposed to using canned foods and premade meals. Meal prepping can be a great way to make healthy meals and then freeze them so they can be defrosted and eaten on short notice, or when life gets busy. This way you can still have healthy, home cooked meals that are easy to reheat. It is also important to eat healthy snacks during the day such as apple slices, nuts, etc. as they are good sources of energy. To help develop a more detailed and individualized meal plan, PTs work closely with nutritionists during your treatment. Physical function is directly influenced by what you ingest during the day.

Remember! The gut takes time to make changes and therefore it may take a few weeks of healthy eating to change how you feel.





## **04. MOVEMENT IS MEDICINE**

It used to be that when patients experienced pain, it was necessary to rest. And while after an acute injury, it is indeed necessary to rest for the first few days, this is no longer applicable to subacute and chronic pain. Physical activity in the form of exercise or activities of daily living are associated with minimal adverse effects and can actually result in pain reduction.

***EXERCISE RELEASES NATURAL OPIOIDS LEADING TO MOOD ELEVATION AND DECREASED ANXIETY AND PAIN.***

Additionally, exercise results in weight loss which decreases weight through the joints and assists with reducing chronic pain. If you are concerned about an exercise program or unsure how to begin exercising without injuring yourself, please feel free to reach out to our clinic for a discovery call or schedule a physical therapy appointment to ensure a safe exercise prescription,





along with techniques to reduce your pain. Overall, exercise is important in the maintenance of bone, heart, skeletal, and muscle health, and mood improvement. It is linked to decreased mortality and a reduction in chronic pain.

If you do not exercise or feel that it may be overwhelming to begin exercising, we gently encourage our patients to begin with a short walk. Walking has great benefits and is feasible for most. Beginning with a ten-minute walk a couple times a week is a great way to introduce gentle exercise. As you become stronger and feel better, increase your walking time. For more specific types of exercise, your physical therapist can assist you with developing a program. If you would like to walk, but walking is bothersome, do not worry, we can help you get there!

## **05. SLOW BUT STEADY**

Our bodies are fluid, meaning they change; and our bodies are constantly changing. Our body yesterday is not what our body is today, nor what it will be tomorrow. This is important to realize during your recovery. Your mind and your body can change for the better and you can return to things you enjoy without pain. Some days may feel easier and better than others, but with persistence and the care of your team, you will reach your goal.

As you move through the healing process, it is important to surround yourself with a supportive community and supportive healthcare providers. With your team, you will make the necessary changes and come out healthier on the other side. At Summus Rehabilitation, we are here to help you initiate that change and will support you through the entire journey, through the good days as well as the bad. With our treatment techniques, we hope that you begin to turn a corner and rid yourself of the bad days altogether. We want you to know that it is possible!

”

**OUR BODY  
YESTERDAY  
IS NOT WHAT  
OUR BODY  
IS TODAY,  
NOR WHAT  
IT WILL BE  
TOMORROW.**

“

# WHEN TO SEEK THE KNOWLEDGE OF A PELVIC HEALTH PHYSICAL THERAPIST

We discussed some diagnoses and causes of pelvic pain, myths, and treatments to help you become more knowledgeable about what you may be experiencing. We want to educate you on your symptoms and give you the power to make changes.

As mentioned before, we still do not know the exact reasons why pelvic pain or these other diseases and dysfunctions occur, but what we do know is that there are resources to help you decrease your pain and discomfort.

***PHYSICAL THERAPY IS ONE OF THE MOST IMPORTANT RESOURCES TO HELP YOU LEARN ABOUT AND ELIMINATE YOUR SYMPTOMS.***

## **So how does physical therapy help relieve pelvic pain?**

Physical therapists are movement specialists and have extensive training and knowledge in how nerves, muscles, and bones affect each other and the rest of the body. As we previously discussed, the pelvis consists of bones and joints, houses the pelvic organs, and serves as an attachment site for muscles from the trunk and legs. Nerves from the spine also traverse through the pelvis and into the legs and innervate the muscles, organs, and tissues in the pelvis. A physical therapist specializing in pelvic health has extensive training, has often earned certifications, and has a deeper understanding of how a disease such as the ones listed above affects the nerves, muscles, bones, and how all of these factors may be contributing to your pain.

Pelvic health physical therapists can evaluate, diagnosis, and treat the pelvic floor muscles. The pelvic health physical therapist can then help you, the patient, develop a plan-of-care to decrease pain through soft-tissue mobilization, exercise, stretching, and education. If you suffer from pelvic pain, it is important that the physical therapist you seek specializes in the pelvic floor and is a good fit for you so that you are able to recover.



### **What does a physical therapy evaluation and treatment look like for someone with pelvic pain?**

Treatments involving the pelvic floor take place in a private treatment room with a closed door. Most evaluations involve just the physical therapist and the patient; however, some patients may decide to bring someone along for comfort such as their partner or a family member. During the evaluation, the physical therapist will spend the first portion of the

session getting to know you and what is bothering you. The physical therapist will ask you detailed questions about your symptoms and about your bowel, bladder, sexual function and habits. Patients with pain sometimes have other symptoms such as urinary or fecal urgency and leakage that may be associated with the pain symptoms and these are also addressed.

Once the physical therapist has gathered all the information from you, they

will look at your posture and how you move. For example, they may look at how you sit, stand, walk, bend over to pick things up, and your balance. They will look at and feel the muscles surrounding your pelvis such as your gluteals, your abdomen, and your hip and back range of motion and strength.

After evaluating the outside muscles, the physical therapist will get your consent to perform an intravaginal and/or intrarectal examination. It is important to note that this examination may or may not happen on the first visit. It is at the discretion of your pelvic health physical therapist and your comfort level and consent. The internal vaginal and/or rectal examinations are a crucial part to your healing. The internal assessment is completed in a private treatment room and does not utilize stirrups or instruments in the vagina or rectum. The physical therapist will first look at the pelvic floor and external genitalia to ensure the skin is intact. The physical therapist will then look at reflexes of the nerves in the perineum (area between base of penis or vagina and anus) and cue for movement of the pelvic floor. From there, the physical therapist will insert one gloved finger with

lubrication into the vagina or the rectum and slowly move their finger to assess trigger points or tenderness, and for coordination. The internal examination allows the physical therapist to directly assess the muscles of the pelvic floor.

The physical therapist may also use a tool called "biofeedback" to assess your pelvic floor muscles. The "biofeedback" machine measures muscle activity through either external sensors or an internal sensor. If the muscles are too active then it allows the patient to see this activity on a computer screen and learn to relax the muscles. The patient does not feel anything since the machine is just reading muscle activity. This is a great adjunct to manual therapy.

At the completion of the exam, the physical therapist will provide education regarding the physical therapy plan-of-care, education about the pelvic floor, dietary and fluid intake habits, and exercises to decrease pain and improve muscle function. The number of times per week and the length of treatment is dependent upon your symptoms and will be a discussion between you and your physical therapist.



# **SUMMUS**

## **REHABILITATION**

**WWW.SUMMUSREHABILITATION.COM**

**MONICA@SUMMUSREHABILITATION.COM**

**9635 W COLFAX AVENUE, STE 306**

**LAKEWOOD, COLORADO 80215**

**Summus Rehabilitation is fortunate to have a pelvic health provider that is experienced in treating pelvic pain and dysfunction.**

**Our therapists are passionate about getting you back to doing the things you love - pain free!**

**If you would like, Monica Vandervoort at Summus Rehabilitation can speak with you over the phone or virtually for a 15-minute discovery call to discuss treatment and determine if physical therapy is right for you.**

**Please do not hesitate to reach out. We are here for you!**



# REFERENCES

- Akiyama Y, Luo Y, Hanno PM, Maeda D, Homma Y. Interstitial cystitis/bladder pain syndrome: The evolving landscape, animal models and future perspectives. *Int J Urol.* 2020;27(6):491-503. doi:10.1111/iju.14229
- Armstrong LE, Johnson EC. Water Intake, Water Balance, and the Elusive Daily Water Requirement. *Nutrients.* 2018;10(12):1928. Published 2018 Dec 5. doi:10.3390/nu10121928
- Bulun SE, Yilmaz BD, Sison C, et al. Endometriosis. *Endocr Rev.* 2019;40(4):1048-1079. doi:10.1210/er.2018-00242
- Curry A, Williams T, Penny ML. Pelvic Inflammatory Disease: Diagnosis, Management, and Prevention. *Am Fam Physician.* 2019;100(6):357-364.
- De La Cruz MS, Buchanan EM. Uterine Fibroids: Diagnosis and Treatment. *Am Fam Physician.* 2017;95(2):100-107.
- Dragan S, erban MC, Damian G, Buleu F, Valcovici M, Christodorescu R. Dietary Patterns and Interventions to Alleviate Chronic Pain. *Nutrients.* 2020;12(9):2510. Published 2020 Aug 19. doi:10.3390/nu12092510
- Grundy L, Caldwell A, Brierley SM. Mechanisms Underlying Overactive Bladder and Interstitial Cystitis/Painful Bladder Syndrome. *Front Neurosci.* 2018;12:931. Published 2018 Dec 12. doi:10.3389/fnins.2018.00931
- Obedin-Maliver J. Pelvic pain and persistent menses in transgender men. Published June 17, 2016. Accessed May 1, 2022. <https://transcare.ucsf.edu/guidelines/pain-transmen>
- Popkin BM, D'Anci KE, Rosenberg IH. Water, hydration, and health. *Nutr Rev.* 2010;68(8):439-458. doi:10.1111/j.1753-4887.2010.00304.x
- Raskov H, Burcharth J, Pommergaard HC, Rosenberg J. Irritable bowel syndrome, the microbiota and the gut-brain axis. *Gut Microbes.* 2016;7(5):365-383. doi:10.1080/19490976.2016.1218585
- Scott AM, Clark J, Mar CD, Glasziou P. Increased fluid intake to prevent urinary tract infections: systematic review and meta-analysis. *Br J Gen Pract.* 2020;70(692):e200-e207. Published 2020 Feb 27. doi:10.3399/bjgp20X708125
- Wozniak S. Chronic pelvic pain. *Ann Agric Environ Med.* 2016;23(2):223-226. doi:10.5604/12321966.1203880
- Zhou L, Foster JA. Psychobiotics and the gut-brain axis: in the pursuit of happiness. *Neuropsychiatr Dis Treat.* 2015;11:715-723. Published 2015 Mar 16. doi:10.2147/NDT.S61997



