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Pelvic Floor Therapy



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Introduction

Pelvic health has long been considered an area of specialty within physical therapy practice. But a growing number of occupational therapists are helping people with pelvic health concerns, also known as pelvic floor dysfunction, live fuller and more active lives. Occupational therapists are highly focused on function, so their aim in working with people who have pelvic floor dysfunction may differ slightly from the role of a physical therapist in this practice area. Regardless, the intent of any sort of pelvic floor therapy is to relieve pain and improve a person's sexual, urinary, and bowel functions.

Pelvic health may be addressed in an outpatient setting if a patient presents with certain symptoms, but it has specifically become popular when implemented within the home or using a virtual coaching model. Due to the holistic, client-centered nature of occupational therapy, OTs are well-suited to address pelvic health concerns in patients of all ages and backgrounds.

Section 1: History and Background ¹

Pelvic floor dysfunction results when muscles, ligaments, and tissues in the pelvic area do not properly relax and/or work together. These muscles are intended to keep the pelvic organs (uterus, vagina, bowel, bladder, and rectum) in place so they don't drop down or interfere with bodily functions, such as urination or defecation. When pelvic muscles are too weak or overactive, this causes someone to have difficulty when eliminating the bowels and bladder. But pelvic floor concerns can cause a range of other issues dependent on the specific type of pelvic floor dysfunction that is present.

There are three main types of pelvic floor concerns: Fecal incontinence (inability to control the bowels leading to bowel accidents), urinary incontinence (poor bladder control leading to urinary leakage), and pelvic prolapse. Individuals with pelvic prolapse experience discomfort secondary to the bladder, uterus, and bowel slipping or dropping into the vaginal canal.

While pelvic floor therapy may be an up-and-coming practice area within occupational therapy, it is by no means a new health concern. Studies show that between 24% and 37% of women are living with at least one pelvic floor diagnosis. Both women and men struggle with pelvic floor dysfunction. Pelvic floor dysfunction can be caused by a range of factors including:

- Mechanical trauma that may have resulted from sexual assault, a fall on the tailbone, or surgery in the pelvic area (such as that for a hysterectomy or prostatectomy)
- Poor posture, most notably when someone is seated in a slouched position that leads to posterior pelvic tilt
- A decrease in estrogen levels, which is usually related to menopause
- Generalized muscle tension related to heavy and/or painful periods and conditions such as endometriosis
- Chronic urinary tract infections (UTIs), thrush, or candida
- A lower body injury (to the hip, knee, or ankle) that has not fully healed, causing compensation through tension in the pelvic floor muscles
- Pelvic prolapse
- Late-stage pregnancy and childbirth; pregnancy places a lot of stress on the pelvic floor from the weight of the uterus and vaginal deliveries can overstretch the pelvic floor muscles
- Chronic bowel or bladder leakage, since this causes someone to tense the pelvic floor muscles in an attempt to hold everything in
- Hypermobility hips or pelvis, which leads someone to tighten their pelvic floor in an attempt to gain more stability
- Obesity or being overweight, since this places undue pressure on these muscles
- Anxiety disorders, which can serve as a trigger for improper holding patterns
- Stress on pelvic floor muscles from excess training or overuse (this could occur as a result of chronic constipation)
- Shallow, quick breathing tendencies

Regardless of whether someone has one or multiple pelvic health concerns, they can benefit from skilled occupational therapy intervention to address their issues in a client-centered nature. As with all patients, OTs strive to utilize a comprehensive approach when working with patients who have pelvic floor dysfunction. This is done by taking into consideration a person's priorities and functional limitations. Additionally, pelvic floor

conditions are considered to be more sensitive and private than many other health concerns. This applies not only to the discussion of uncomfortable symptoms during sessions, but it also becomes apparent when patients are doing exercises that place them in a vulnerable position (e.g. on their back, in sidelying). This can go for patients with any sort of medical history, but especially those with a past incidence of physical or sexual trauma. For this reason, person-centered care focused on pelvic floor dysfunction can make a patient feel more reassured and better served while also producing better outcomes.

Section 1 Personal Reflection

What are some ways that an occupational therapist can structure the treatment area and plan to make a domestic violence survivor feel more comfortable?

Section 1 Key Words

Fecal incontinence - An inability to manage the function of one's bowels

Holding patterns - A learned behavior that turns into a chronic tendency to clench the buttocks, abdominal muscles, or pelvic floor muscles in response to stress or certain other triggers

Pelvic floor dysfunction - Poor functioning (either overactive or weak) of the muscles in the pelvic area that hold many organs in place

Pelvic prolapse - A result of dysfunctional pelvic floor muscles that allow the uterus, bladder, and/or bowel to slip out of the pelvic area and into the vaginal canal

Urinary incontinence - An inability to manage the function of one's bladder

Section 2: Pelvic Floor Evaluation 1,2

Before an occupational therapist can address pelvic floor dysfunction, they must complete an evaluation and assess the current strength of the pelvic floor muscles. Regardless of the patient, an occupational profile is a great way to determine strengths, areas for improvement, goals, and person-identified priorities. However, the occupational profile becomes especially crucial for pelvic floor patients. When completing their interview and initial evaluation, therapists should be sure to address areas such as:

- Intercourse, including frequency, pain levels, positions, and safety
- Menstrual care and management, particularly period symptoms, usage of tampons versus pads, and pain related to tampon insertion (if applicable)
- Eating and drinking habits, including caffeine, water, and alcohol intake
- Bathroom routines, including pain, frequency, urgency, and any difficulty completely eliminating bowels or bladder

The next part of the evaluation usually focuses on the therapist testing a patient's motion and strength, specifically of the abdomen, back, and hips. Since misalignment and other concerns in these areas can lead to pelvic floor dysfunction, it's important to rule these issues out before moving forward. To do this, therapists will complete motion and strength testing (usually against gravity) while a patient is both seated and lying down. This not only gives therapists a good idea of a patient's functional abilities, but it also lets therapists see exactly how pain impacts a person's ability to complete certain actions.

Unlike some types of testing that simply involve evaluating the gross strength of a set of muscles, evaluating the pelvic floor muscles is slightly more complex. The aim of any pelvic floor examination is to determine the ability of the pelvic floor muscles to squeeze and lift, demonstrate strength, and sustain a contraction for a period of time.

For this reason, such an examination can only be done by palpating the muscles as part of an internal examination (also known as dynamic palpation). If someone is not at all comfortable with this portion of the evaluation, they can opt out. However, therapists recommend it since it gives them valuable information about the function of those muscles. In order to protect a person's sense of security and confidentiality, many therapists try to make patients feel more comfortable by offering them the option of having a friend or family member in the room. Some facilities also offer up their own therapists to serve as third parties and sit in during these examinations.

There are several nuances associated with internal examinations. Many professionals regard them as cost-effective, simple (since no equipment is required), and fast. Internal examinations are also highly versatile in that they can be completed in sitting or standing and used on either sex. They pair well with testing for the cough reflex and can even give therapists a good sense of someone's muscle tone, pain levels, and anatomical abnormalities. Internal exams can also help differentiate between issues on the left side of the pelvic floor versus the right side of the pelvic floor, which is helpful knowledge for

treatment planning. Information obtained from an internal examination also applies to many disciplines, so the information can be readily interpreted by therapists, nurses, and doctors alike. The down side to this style of testing is that the therapist administering the examination should be relatively experienced in this area and subjective bias can skew the results.

An internal examination of the pelvic floor can be done using one of several evaluation tools. The Qualitative PFC was developed in the 1940s by Dr. Kegel, whose name you may recognize from that of pelvic floor strengthening exercises. This testing method is not usually favored since it requires the use of a perineometer to measure contractions. Digital palpation methods – those that utilize gloved fingers – are more common and more accurate. The Worth Scale involves single digit palpation that measures pressure, duration, position, and ribbing. The Brink Scale uses the index and middle finger to determine duration, pressure, and displacement of the fingers during the exam. The Modified Oxford Grading Scale (MOGS) is held in slightly higher regard for its high inter-rater reliability. It is also simpler than the other scales, since it uses one of 6 muscle grades (0-5) to identify the strength of the muscle contraction on the index finger.

The digital palpation method that is considered the gold standard is the ICS scale, which was officially validated in 2009. This consists of four muscle grades, which are somewhat similar to those for typical muscle testing:

- Absent, which is given to people when no contractions can be palpated
- Weak to describe people who have a faint contraction present
- Normal, which is assigned to anyone who has a typical muscle contraction
- Strong is the grade for people with an overactive muscle contraction

Despite the simplicity of the measure, therapists must pay special attention to voluntary relaxation after contraction, asymmetry, pain, and the behavior of pelvic floor muscles when abdominal pressure is applied. The ICS scale was found to have moderate to great intra-rater reliability specific to the recommendations made as a result of this test. For this reason, it's considered the most clinically significant tool for the purposes of subsequent therapy intervention.

Section 2 Personal Reflection

How might an occupational therapist change their approach to treatment if a patient declines an internal exam? Would they need to add other components to offer more robust intervention?

Section 2 Key Words

Cough reflex - A defensive reflex that is intended to occur in an attempt to expel debris from the throat or lungs; when a cough is elicited, it should lead to contraction of the pelvic floor muscles

Dynamic palpation - A form of assessment that involves placing a person in a variety of positions while checking for abnormal contractions, structures, or other deficits; this process is also known as motion palpation

Section 3: Pelvic Floor Symptomatology ^{3,4,5}

Depending on the type of pelvic floor concerns that someone is dealing with, they may present with a range of differing symptoms. In particular, someone who has a hypertonic (strong or overactive) pelvic floor may experience any of the following:

- Inability to feel contractions in the pelvic floor
- Pain extending from the pelvis to the abdomen, urethra, vagina, rectum, penis, and/or testicles
- Discomfort or pain when emptying the bowels
- Increased urinary urgency and frequency
- Discomfort or pain with sex, especially with deeper penetration; this is called dyspareunia
- Slowed urinary flow
- Lower back pain
- Feeling as if your tampon is being pushed out
- A distinct bulge present at the vaginal opening

- Incomplete bladder and bowel emptying (also known as urinary retention and fecal retention)
- Excessive bloating and cramping
- Spasms of the pelvic floor muscles
- Chronic constipation
- Pain in the vulva with sex (also called vulvodynia)
- Urinary leakage secondary to stress
- Premature ejaculation (in men)
- Erectile dysfunction (in men)

When the pelvic floor muscles are chronically tensed, this makes it nearly impossible for someone to recognize when those muscles are actually contracting since they are rarely relaxed. For this reason, it may be difficult for men or women with such vague contractions to pinpoint the type of pain that is related to this, especially when it becomes diffuse and impacts nearly the entire pelvic cavity and abdominal region. It's also common for men to assume that pelvic floor pain extending to the penis is attributed to a sexually-transmitted infection (STI) rather than it being a muscular issue.

Any discomfort that occurs when emptying the bowels stems from the pelvic floor muscles and their inability to relax. In order to effectively eliminate a bowel, the body must enter a state of peristalsis where the muscles of the intestines contract and relax in equal parts. This combination of movements propels feces along the length of the digestive tract. So if relaxation is lacking, the feces will get stuck in a portion of the intestines and cause incomplete emptying and constipation. The discomfort (and sometimes pain) comes from someone straining in an attempt to get the remaining intestinal contents out. The retention of feces can also cause someone to experience lower back pain and excessive bloating or even cramping.

Someone will experience greater urinary frequency and even urgency when these constant pelvic floor contractions place pressure on the bladder. A feeling of pressure on the bladder is typically the signal that tells the body it's time to use the bathroom. Since the body cannot recognize the difference between a full bladder pressing on other organs and tight muscles pressing on a half-full (or slightly full bladder), the signal will be sent either way and someone will feel the need to run to the bathroom. Oftentimes,

running to the bathroom will be met with a small amount of urination and this does not match the urgency someone initially feels. This pressure on the bladder also impacts the urethra, which causes someone to experience a slowed urine flow.

While urinary leakage is more common with weak pelvic floor muscles, it can also occur with an overactive pelvic floor. When muscles are overly tight for too long, they are at risk of giving way unexpectedly. As a result, this can cause urinary leakage. While this does not occur as often with tight pelvic floor muscles, it can still impact someone's life negatively.

Tightness in any muscles can cause knots, which is why one can often be observed at the opening of the vagina. This tension also causes difficulty inserting a tampon followed by a consistent feeling that the tampon is falling out (due to pressure placed on it by the pelvic floor muscles). Tight muscles will inevitably cause spasms, since the muscles cannot sustain a contracted position for too long. Spasms can be painful and even impact urinary or bowel function.

For some people, painful sex can be purely due to a tight pelvic floor. This means that any amount of penetration will trigger discomfort. However, the body's response to sex can make this pain even less tolerable. Without knowing it, our bodies will tense up in response to events that have caused pain in the past. As a result, our pelvic floor muscles will become even tighter in anticipation of the pain that will likely result. This can have a large impact on someone's sexual function and relationships.

The opposite end of the spectrum can cause just as many problems. Some of the following symptoms are an indication that someone might have hypotonic (weak or underactive) pelvic floor muscles:

- Urinary leakage secondary to laughing, coughing, sneezing, or running
- Difficulty reaching the toilet in time
- The sensation of the pelvis or back dragging behind you
- Expelling an excess of gas from the vagina and/or anus when lifting heavy objects or simply bending over
- Feeling as if your tampon is being pushed out, simply falls out, or becomes otherwise dislodged
- Discomfort during sex, usually related to organ prolapse (called dyspareunia)

- Bedwetting (regardless of age)
- Vaginal heaviness (which usually results from organ prolapse)
- Decreased sensation in the vagina

When the muscles of the pelvic floor are not tight enough to keep the bladder and surrounding organs in place, it can lead to urinary leakage. The pelvic floor muscles are intended to be just tight enough to prevent urinary leakage as a result of basic movements. However, when they are weak, otherwise simple motions like laughing, coughing, or sneezing cause a shift in the balance of the pelvic region, which can lead some urine to leak. Similarly, this can also cause people difficulty “holding it in” when traveling to the bathroom. Just as the pelvic floor can have trouble keeping urine in, it also may not be able to handle gas. This causes it to be periodically released when someone engages in activities that exert the pelvic floor muscles.

Someone who reports a feeling of heaviness in the pelvic region may be suffering from organ prolapse resulting from pelvic floor muscles that cannot contain nearby structures. This is the same reason that people with weak pelvic floor muscles will experience discomfort during sex. If you remember, someone with tight pelvic floor muscles will experience pain since the muscles do not effectively relax to allow for penetration. Conversely, anyone with weak pelvic floor muscles will usually be uncomfortable because penetration bumps up against organs that are positioned lower than they should be.

When women experience decreased sensation in the vagina, it is often due to weak pelvic floor muscles that lack proper innervation. This could point to issues with the pudendal nerve, which is located in the pelvic area. These nerve issues could also be the source of weak pelvic floor muscles, since most nerves have both sensory and motor pathways.

Tampon-related issues are common with women who experience pelvic floor issues. While pelvic floor tightness can cause tampons to be essentially pushed out of the vaginal canal, weak pelvic muscles often struggle to hold tampons in place. When this happens, women may feel as if the tampons are slipping or falling out, even after they have been inserted properly. If this isn't the case, women may feel as if they are shifting and assuming other positions once inserted. Both can be painful and also problematic since women may have difficulty removing their tampon when the time comes.

While these symptoms can impact any woman or man at any age, there are certain conditions and life events that make someone more susceptible to pelvic floor dysfunction:

Childbirth & Pregnancy

There are also a range of conditions that cause their own set of issues related to the pelvic floor musculature. One of the biggest populations with pelvic floor dysfunction is postpartum women. This is because vaginal childbirth (and late-stage pregnancy) both place a great amount of strain on the muscles in this part of the body. In fact, urinary incontinence and pelvic organ prolapse are some of the most common issues amongst women who have recently delivered a child. Regardless of what a woman's pelvic health is like before the delivery process, they are at risk for experiencing issues simply due to the physical trauma of pregnancy and/or childbirth. Perineal injuries (such as an episiotomy) also play a part in the development of pelvic floor issues, mainly because the body tenses so much in an attempt to prevent a perineal tear. Vaginal delivery entails a woman assuming positioning that essentially places the hips in hyperextension. This posture can impact the function of nerves in the pelvic area, which further promotes pelvic floor weakness and dysfunction.

Hysterectomy

A hysterectomy is an example of a surgical procedure that can cause injury to the pelvic floor muscles. Not only can this procedure impact the pelvic floor and place someone at a greater risk of organ prolapse, but a hysterectomy can also harm the structures in a woman's urinary tract. This can lead to permanent urinary incontinence, which may even be worsened by a weak or otherwise injured pelvic floor.

Another health concern associated with a hysterectomy is a pelvic organ fistula, which occurs when an outside trauma (in this case, surgery) causes the development of another hole in the vaginal canal. Since the canal is only intended to have openings at either end, this new hole unintentionally forces urine and stool to pass through the vaginal canal and out of the body that way. This places someone at risk for infection since such materials can throw off the vagina's pH balance. Women who are living with a pelvic organ fistula may also suffer from urinary or fecal incontinence and recurrent UTIs, which can be difficult to manage.

Endometriosis

We mentioned earlier how many people with pelvic floor dysfunction develop a protective response to shield their bodies from pain. This mechanism also occurs with women who have endometriosis, which is a reproductive condition that causes inflammation in endometrial tissue within and outside the uterus. Endometriosis also causes swelling of tissue and organs within the pelvic cavity, and this inflammation leads pelvic floor muscles to tense up as a result of the chronic pain a person experiences. It is more common for women with endometriosis to experience overly tense pelvic floor muscles due to the chronic and persistent nature of this condition. However, the opposite may also affect women with endometriosis, depending on their medical history and other risk factors they may carry.

Lichens sclerosus

An immune system condition called lichens sclerosus (LS) can also cause pelvic floor dysfunction. The primary symptom of LS is skin concerns, including itching, white spots, red rashes, bruising, and skin tears. These issues impact the vagina and the vulva, and most commonly affect women after they have experienced menopause and young girls who are not yet menstruating. The mechanisms of this condition that cause pain typically stem from overly tight pelvic floor muscles.

Irritable Bowel Syndrome (IBS)

As a digestive condition that causes chronic constipation or diarrhea, pelvic pain, and bloating, IBS is often closely connected to pelvic floor dysfunction. When someone has tight pelvic floor muscles, they usually have difficulty eliminating their bowels. Similarly when their pelvic floor muscles are on the weaker side, they will struggle to control their bowels and may experience stool leakage. If irritable bowel syndrome persists without being treated, it can worsen someone's pelvic floor dysfunction.

Section 3 Personal Reflection

What emotional and physical outcomes might develop if a person has urinary and stool leakage?

Section 3 Key Words

Dyspareunia - A symptom that causes pain and discomfort during sex

Endometriosis - A hormonal condition in which high levels of estrogen cause endometrial tissue growths both within and outside of the uterus; resulting issues range depending on the condition's severity and location of the growths but a main symptom is pelvic pain

Hysterectomy - A surgical procedure that entails removing the uterus; in some cases, this surgery also includes the removal of one or both ovaries, the fallopian tubes, and the cervix

Lichens sclerosus - A skin condition that stems from an immune reaction, which causes itching, pain, redness, and skin tears on the vagina and vulva

Perineal tears - Skin lacerations that commonly occur as a result of vaginal childbirth; also known as an episiotomy

Peristalsis - Natural, involuntary movements that take place within tube-like structures (or canals) in the body; these wave-like movements alternate between relaxation and contraction in an effort to propel the contents of the canal forward and outward

Pudendal nerve - A nerve located in the pelvic/femoral region that innervates the perineum, including the genitalia, anus, urethra, and pelvic floor muscles

Urinary retention - The inability to completely empty the bladder when cued to

Urinary tract infection (UTI) - A bacterial infection that affects one or more parts of the urinary tract (bladder, urethra, or kidneys); UTIs typically cause symptoms such as pelvic pain, bloating, pain with urination, increased urgency, and sometimes blood in the urine

Vulvodynia - A condition that causes persistent pain in the opening of the vagina, called the vulva

Section 4: Pelvic Floor Interventions 6,7,8,9,10,11

Depending on the cause of pelvic floor dysfunction, an individual may benefit from various interventions. Behavior modification is one type of treatment that has been proven effective in managing some pelvic floor dysfunction. Since stress plays a large role in overactive pelvic floor musculature, behavioral interventions attempt to manage that stress to improve pelvic health. Some of the behavior modification strategies that occupational therapists can educate their patients on include:

- Surface electromyography (EMG) biofeedback with real-time ultrasound

- This is a form of biofeedback that involves placing electrodes on the surface of the abdomen and pelvis to monitor the muscle activity occurring in that area. With the use of real-time ultrasound, a person can view their pelvic muscle activity and engage in relaxation strategies and stretches as per their therapist to decrease the muscle tension and overall activity.
- Self-monitoring and symptom tracking for pain and bowel or bladder management
 - Patients are encouraged to keep a journal that gives healthcare providers a snapshot of their concerns each day
- Urge strategies
 - The idea behind this is to avoid using the bathroom every time you feel the urge to by extending the time between bathroom trips. The aim is to urinate every 2 to 3 hours.
 - Another strategy is double voiding, which involves urinating twice in one trip. Do this by going once and then waiting a few minutes before voiding again.
 - Activity engagement for distraction is another helpful tool.
- Changing fluid consumption patterns
 - This will vary depending on your doctor's instructions regarding how much and when you can drink.
- Bladder retraining
 - This involves a toileting schedule to improve someone's ability to successfully use the toilet without having accidents. It's best to schedule these every two to four hours.
- Dietary modifications to lessen the impact of symptoms like constipation
 - Introduction of fiber-rich grains
 - Consumption of fruits and vegetables that are high in fiber but low in acidity, including carrots, melon, avocados, apricots, and bananas

- Supplement with omega-3 fatty acids such as eggs and oily fishes including mackerel, salmon, and anchovies
- Avoid caffeine, alcohol, spicy foods, carbonated beverages, and artificial sweeteners

Relaxation techniques also play a big part in remedying pelvic floor dysfunction. Therapists can train patients on some of the following techniques:

- Belly breathing
 - While deep breathing of any kind can assist with relaxation, thereby improving someone's pelvic relaxation, belly breathing is even more helpful. This type of breathing actually encourages some stretching in the pelvic floor muscles. So, when someone is trained to belly breathe several times each day, they are cutting down on tension little by little before it builds up and causes major symptoms.
 - Belly breathing is best done while lying down and putting one hand on the belly while the other one rests on the chest. The person should take a deep breath through their nose and pay special attention to how their belly pushes their hand outward. They should also take care to not move the hand on top of their chest. They can then breathe out by pursing their lips and exhaling.
- Progressive muscle relaxation (PMR)
 - This involves relaxing all parts of the body where someone might carry tension, including the structures of the pelvic floor.
 - Someone can practice PMR by laying down or sitting in a chair. They start at their toes and move upward to the next muscle set or at their head and move downward to the next muscle set. When the person gets to each muscle group, they are to tense them for 5 to 10 seconds and then relax for 5 to 10 seconds before moving to the next group.
- Mindfulness-based stress reduction (MBSR) techniques
 - This involves a heightened level of awareness to improve someone's ability to control (mainly relax) their pelvic floor muscles.

- Just as you would train someone to pay greater visual attention to their surroundings, you can train someone to have increased body awareness and use this awareness to change the resting state of their pelvic muscles.

There are also devices that can assist with managing pelvic floor dysfunction. One is called the TheraWand, which can be used for the purpose of independent trigger point release and internal massage. This device is manual and has two curved ends, one which is used as a handle and another that is to be inserted into the vagina according to instructions. Other devices that can assist in managing pelvic prolapse for females include a vaginal pessary and urethral inserts. A vaginal pessary is a circle-shaped device that is intended to be inserted into the vagina and worn throughout the day to support a sagging uterus. Most pessaries are designed to be worn daily for five to six months. However, women with more severe prolapse may be prescribed a cube pessary, which must be removed each night and reinserted in the morning. A urethral insert is a small device that is inserted into the urethra of the male penis to prevent urinary leakage and general incontinence.

Manual treatment is another intervention that occupational therapists can use to assist patients with pelvic floor concerns. This involves both internal and external myofascial release targeting the vagina, the rectum, or both structures. One of the most common interventions for weak pelvic floor dysfunction is pelvic floor strengthening exercises. While it may take up to three months for someone to notice a difference in their symptoms, they are still considered highly effective. Pelvic floor strengthening exercises include some of the following:

- Gluteal strengthening to offload pressure from overactive pelvic floor muscles
- Kegel exercises
 - Start by laying on your back with your knees bent and feet flat.
 - Exhale and suck your stomach in as if you're pulling it toward your back.
 - While doing this, tense then quickly release your pelvic floor muscles.
 - Repeat this sequence 10 times two to three times each day.
- Heel slides
 - Lay on your back with your knees bent and your feet flat.

- Inhale, exhale, then tighten your abs and pelvic floor muscles while sliding your left heel outward.
- Slide it back in toward your body and repeat 10 times.
- Switch to the other leg and repeat the entire sequence 10 times.
- Toe taps
 - Lay on your back with your knees bent and your feet flat.
 - Inhale, exhale, then tighten to your abs and pelvic floor muscles.
 - Lift one leg up as if you're marching then slowly lower it back to the previous position.
 - Repeat with the other leg. Alternate between each leg 10 times.

There are similar exercises and stretches for people with overactive pelvic floor muscles:

- Happy baby
 - This is a yoga pose that involves laying on your back, bringing your knees up to your chest, and holding each foot at the arch.
 - Spread your knees as far as you can (ideally until they are wider than your torso).
 - For more of a stretch and greater benefit, try flexing your foot and digging your heel further into your hands.
- Child's pose
 - This is another yoga pose that involves starting off on your hands and knees, then progressively spreading your knees further apart.
 - Move your torso downward and try to get it as close as possible to the mat.
 - Stretch your arms out in front of you if you're able to.
- Piriformis stretch
 - Lay on your back with your knees bent.

- Prop one ankle up on the opposite knee and use your hands to pull the opposite thigh toward you.
- Hold this for as long as you can, then switch to the other leg.
- Flat frog pose
 - This is another yoga pose that is intended to stretch the hip adductor muscles, which are often tight in people with pelvic floor concerns.
 - Lay on your back and spread your knees out so the sides are touching the ground.
 - If you are feeling too much of a stretch or this is painful, use towels, small pillows, or a yoga brick to support your knees.
- Table stretch
 - While standing 2-3 feet in front of a wall, bend at the hips and place your hands flat on the wall.
 - Slightly bend the knees and hold this position for 10-20 seconds.
 - If you feel too much discomfort or stretch, straighten your knees and torso slightly.
 - If you don't feel enough of a stretch, bend your knees slightly more.

Section 4 Personal Reflection

What combination of treatments might be best for someone with underactive pelvic floor muscles and a low tolerance for exercise?

Section 4 Key Words

Mindfulness-based Stress Reduction (MBSR) - A type of mindfulness that can be used to help someone increase their awareness of the tension they carry in the pelvic muscles

Progressive muscle relaxation (PMR) - A type of relaxation strategy that involves fully tensing then relaxing each muscle group in the body one at a time

Surface EMG Biofeedback - A type of behavior modification that involves placing electrodes on the surface of the pelvic muscles; this gives a person information about

how tensed (or relaxed) their muscles are; they should then practice relaxation techniques and other strategies while the electrodes are still attached to gauge their body's response and the effectiveness of each method

TheraWand - A manual therapy device that allows a woman to manipulate the pelvic floor muscles and relieve tension

Urethral insert - A device that is placed in the male penis to prevent urinary leakage and incontinence

Urge strategies - Methods that someone uses to prevent incontinence or accidents; can include toileting schedules, double voiding, and limiting fluid intake

Vaginal pessary - A manual device inserted in the vagina to manage uterine prolapse; a vaginal pessary can be worn 24/7 for four to six months; its counterpart for more severe cases is called a cube pessary, and this can only be worn during the day

Section 5: Certifications 12,13,14

While occupational therapists have training as generalists, there are not many therapists who have a good working knowledge of this practice area. As a result, it's usually best for OTs wishing to enter the pelvic health practice arena to pursue additional education. This does not necessarily mean added degrees, but it can be very beneficial to take continuing education courses in pelvic health. This will give therapists a basic understanding of not only the mechanisms and symptoms related to pelvic floor dysfunction, but also of the treatments that are most effective.

There may be a range of courses available, but there are two certifications that typically stand out from the rest. An OTR can pursue a Pelvic Rehabilitation Practitioner Certification (PRPC). This is a practice-based certification that does not require any courses, but it serves to verify someone's experience in this practice area by their ability to pass a certification exam. In order to qualify for the PRPC exam, someone must have provided 2,000 hours of direct pelvic floor treatment to patients in the past 8 years.

Another certification is the board certification for biofeedback specializing in pelvic muscle dysfunction (BCB-PMD) through the Biofeedback Certification International Alliance. Someone can attain this certification either by prior experience in treating patients with pelvic floor dysfunction or by taking an examination that proves their expertise in this area.

Evidence in Motion (EIM) is another well-respected certification in the field of pelvic medicine. EIM's Pelvic Health Specialist Certification consists of five courses (including two electives) followed by case presentations and a capstone project. This is open to both PTs and OTs and this particular certification can even be taken as part of a DPT program. It can be completed entirely virtually or in weekend intensives in-person. The entire program takes 7 months to complete.

Section 5 Personal Reflection

What pelvic health certification might be appropriate for a newly-graduated occupational therapist?

Section 6: Case Study

A 30-year-old female presents to an orthopedic clinic with persistent pelvic pain. She has a recent diagnosis of endometriosis confirmed via diagnostic laparoscopy. The symptom that impacts her the most is pain during sex, but she also struggles with constipation, chronic bloating, and pain with urination

1. What should the therapist be sure to include in this patient's occupational profile?
2. Does it sound like this patient has overactive pelvic floor muscles or underactive pelvic floor muscles?

Section 7: Case Study Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What should the therapist be sure to include in this patient's occupational profile?

The therapist would be remiss if they did not include the patient's family history, since a history of endometriosis or organ prolapse in relatives can shed important details about the patient's own progression. This would also tell therapists how to proceed next in terms of treatment. The therapist should also ask about the patient's menstrual cycle, including flow, length of periods, pain, and any other

symptoms that may be present (whether they seem relevant or not). The therapist should inquire whether this patient has children or not, since pregnancy and childbirth can heavily contribute to the development of [pelvic floor concerns. It can also be helpful to know whether or not this patient is taking oral birth control pills or another form of contraception, since these can have an impact on the menstrual cycle and may make symptoms better in some cases.

2. Does it sound like this patient has overactive pelvic floor muscles or underactive pelvic floor muscles?

Based on the symptoms this patient presented with, it appears as if she has overactive pelvic floor muscles. But this cannot be confirmed until a full evaluation is complete, including an internal examination.

Section 8: Case Study

A 50-year-old male presents to his doctor with bedwetting, urinary urgency throughout the day, increased frequency of urination, and some slight burning when urinating. The doctor was able to rule out an overactive bladder, enlarged prostate, and prostate cancer after some preliminary testing. He is referred to a pelvic floor occupational therapist for treatment.

1. What information should the OT first look for during their evaluation?
2. What is the best treatment approach for this patient?

Section 9: Case Study Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What information should the OT first look for during their evaluation?

The OT should complete an internal examination to determine the strength of this patient's pelvic floor muscles. They can do this via a physical exam or using real-time ultrasound. The OT can also ask the patient to complete a series of movements that help identify the pelvic floor muscles. The OT should also assess

the patient's gluteal muscles to determine if tightness there is offsetting the pelvic floor function.

2. What is the best treatment approach for this patient?

A patient with these symptoms would benefit from a regimen consisting of toe taps, kegels, and heel slides. Depending on the results of the evaluation, he might also benefit from gluteal strengthening exercises. If these recommendations are not effective after 5 to 7 weeks, then the OT should educate the patient on the possibility of using a urethral insert to better manage incontinence.



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