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# INTERDISCIPLINARY APPROACH TO PELVIC PAIN: It takes a TEAM to care for you!

When most people think about pain, they think about an injury like a broken arm. With an injury like this, the body usually heals quickly and the pain resolves. However, for approximately one in four people, pain is something that they live with over a much longer period of time. Pain that lasts longer than would be expected, often considered to be more than 3-6 months, is called persistent or chronic pain. This pain might have started with an injury, infection or disease that then did not resolve with treatment or time. Other people have pain that seemed to start out of the blue without any clear trigger.

### Pelvic Pain is Complicated.

Almost everyone has experienced some sort of pain in their belly in their lifetime with a variety of conditions such as urinary infections, tummy bugs, indigestion and period cramps. These are very common events and usually very easily treated. However when belly pain does not resolve as expected and becomes persistent, the treatment is no longer straightforward. If you live with persistent or chronic pain in your belly and pelvis you may already feel that things have become more complex.

Persistent pelvic pain is rarely due to one diagnosis, one organ, or one tissue. Treatments that aim at a single problem are often unsuccessful and people can easily become discouraged that nothing seems to be helping. Fortunately, research has shown that an interdisciplinary approach can be effective in helping people regain function and live a full life.

#### What is Interdisciplinary Care?

People living with chronic pain often experience symptoms in many different parts of their body. Interdisciplinary care involves a team of clinicians who specialize in different areas and work together to address all of the different problems an individual is suffering.

The members of the interdisciplinary team will vary depending on your needs but may include a gynecologist, physical therapist, pain psychologist and pain physician. Other specialists such as a gastroenterologist (Gl/gut) and a urologist (bladder, prostate) may need to be consulted depending on your symptoms.

The most important member of the team, of course, is YOU. With active participation in this team effort, it is possible to gain control of your pain.



# How Do So Many Parts of the Body Become Involved in Chronic Pelvic Pain?

## The Pelvic Organs and Their Nerves

The pelvic organs include the uterus, ovaries, fallopian tubes, prostate, testicles, lower intestine (gut), bladder and the lining surrounding the organs called the peritoneum. Nerves from these organs send signals to your spinal cord and then to your brain where the message is interpreted. As all these organs share common nerves the brain may not be able to work out exactly where each message came from.

The spinal cord, however, is not just a highway to the brain; the messages going to your brain get processed in your spinal cord. When there are a lot of messages traveling along a nerve through the spinal cord this can lead to it becoming more efficient at delivering the message, transmitting faster and stronger than before. This effect can be helpful in some instances, for example when practicing a sport or musical instrument sending repeated messages along a nerve helps you become better over time. With pain however this effect is unhelpful, and when the nerves become more efficient at transmitting messages this is called "sensitization". This results in sensations being transmitted faster and stronger and the resulting pain being felt more strongly.

For some people this sensitization can start with one part of the body, but due to the overlapping interconnected nerve supply, other pelvic organs may get in on the act. For example many women who suffer from painful periods may then also develop bladder pain syndrome and/or irritable bowel syndrome (IBS). As well as pain other body sensations such as indigestion, nausea, palpitations, dizziness, weakness and fatigue.

Interestingly, repeated messages traveling along a nerve can also result in messages traveling back the opposite direction. Nerves in the spinal cord can send chemical messages back to your pelvic organs causing or worsening inflammation. Inflammation also makes nerves more sensitive, further worsening pain.

#### The Muscles and Joints

When we think about pain coming from the pelvis the focus is often put on the internal organs. These organs however are contained within pelvic skin, fascia, muscles and bones, which can all also contribute to pain.

The muscles in your lower back and abdominal wall form the front and back borders of your pelvis, and a hammock of muscles around the vagina/penis and rectum, referred to as the pelvic floor, supports the contents of the pelvis. Each muscle in your body is surrounded by a strong fibrous tissue called fascia and muscles attach to bones with ligaments.

These muscles, fascia, ligaments and bones share some of the same nerves as your pelvic organs. Sensitization in these nerves from repeated nerve messages can lead to tightness,



spasms, and tender areas in the muscles. Tight knots (a focal point of muscle tension) in a muscle are sometimes called trigger points.

The tension, trigger points, and soft tissue restrictions can cause problems with how the muscles work which can lead to movement dysfunction, pain with movement, pain with intercourse/sex, frequent urination/peeing, problems getting urine stream started (hesitancy), constipation, bloating, and vaginal, rectal, scrotal, and low back pain.

## <u>Nerves</u>

When nerves are damaged this can lead to neuropathic (nerve injury) pain. Nerves in the abdominal wall, vagina, rectum and lower back can become injured, for example, in a motor vehicle or bicycle accident, a fall, childbirth or surgery. Nerves can also become over-stretched or irritated by specific types of exercise or activities such as prolonged sitting (long air flights, seated employment, bike riding). Neuropathic pain often requires slightly different treatments than other types of pain and so it is important that this is correctly identified.

### The Brain as a Danger Detector

Without a brain, no-one would experience pain. All signals coming from your pelvic and abdominal organs, the musculoskeletal system, the nerves and spinal cord are interpreted by your brain. The brain sees pain as a warning to your body that there might be danger and to take action by going into protective mode, for example to take your hand off a hot burner.

After an injury the brain interprets these pain/danger signals as a need to rest and heal. With chronic pain and sensitized nerves however this response can become too protective and unhelpful. Living with chronic pain can change your brain, your thoughts and your moods and your altered brain may more efficiently send and receive pain signals from your organs, muscles, and bones.

Because of the brain's connectedness, areas that control what you feel physically (sensory areas) and your muscle movements (motor areas) can also affect areas involved with your mood (emotion) and thought (cognitive) areas. Chronic pain can therefore be associated with feelings such as hopelessness, helplessness, loss of pleasure, worries you will never get better, feelings of stress, fear, anxiety, and fatigue.

These changes are a result of something called neuroplasticity – changes in the connections in your brain. Importantly, these changes are NOT permanent and because your brain can change, it can be retrained to make new connections to serve you in a more positive way.

#### What is Involved in the Interdisciplinary Treatment Approach?

The first step in gaining control of your own healthcare journey is to learn more about your body and how the pain-system works. Many resources exist, in books, websites, videos and courses,



to help you gain this knowledge. It has been shown that people who have a good understanding of their own healthcare needs are better able to navigate the journey to better health.

This knowledge will help you to understand why an interdisciplinary approach to treatment is needed. Your treatment will be most effective when it addresses BOTH the signals coming from your pelvic region to your brain, as well as the signals coming from your brain to your pelvis. This can be thought of as a "bottom up" and "top down" approach to healing.

# How are the Appropriate Treatments Selected?

The initial specialist you consult will depend on your specific circumstances and the type of symptoms you have. For example, if you are female, have painful menstrual periods, abnormal vaginal bleeding, vaginal pain, abnormal vaginal discharge, and/or pain with sex you will probably consult first with a gynecologist. If you have diarrhea and indigestion you might first consult a gastroenterologist (GI). After the initial assessment, or during the course of treating your pain, symptoms related to other organ systems may require you to see another specialist.

No matter which clinician you see first, they should complete a thorough assessment and review of all relevant operative, ultrasound and lab reports. Detailed pain questionnaires and assessment forms can help with ensuring a complete picture is obtained. It is helpful to bring your questions and notes regarding what is important to you.

The physical exam should include assessment of the pelvic organs, the muscles and nerves of your abdominal wall; lower back, vagina and/or rectum and the pelvic bones. This is often called a "pain mapping" physical exam.

## What are "Bottom Up" Approaches?

Medications, nerve blocks, and sometimes surgery might be recommended. For example, women with menstrual pain, or pain that is worse around ovulation benefit from hormonal therapies such as blood test driven bioidentical hormone supplementation, birth control pills, or hormone intrauterine devices (IUDs).

Most people with chronic pelvic pain also have pelvic floor, abdominal wall or low back muscle and bone abnormalities even if they have primarily organ based pain. Physical therapists are key members of your interdisciplinary pain team and can work with you to improve the movement and function of these musculoskeletal components.

## What are "Top Down" Approaches?

In order to get your brain and spinal cord (central nervous system) out of "danger" mode and improve your pain, other approaches are needed. The goal is to retrain your body's nervous system to dampen or inhibit, instead of increasing or amplifying, pain signals. Anxiety, depression and worry can be the result of pain but can also in turn then amplify pain, and so treating these can help improve quality of life and also reduce your pain.



Pain psychology is a little different from counseling for mood problems, and has been proven effective in the treatment of pain. The treatment will be tailored to your needs but well studied approaches for chronic pain include cognitive behavioral therapy (CBT), interpersonal psychotherapy, and mindfulness-based stress reduction (MBSR).

Many people who live with chronic pain find that typical "painkillers" such as acetaminophen/ paracetamol and anti-inflammatories are not effective for their pain. Sometimes medications that affect nerve-firing such as anticonvulsants, antidepressants and local anesthetics can be useful. You can discuss if these are suitable for you with your physician.

Other approaches that some people living with pain find useful include dietary changes, acupuncture, hypnosis, yoga, TENS, meditation or a pain program.

While there is not an easy or quick fix to chronic pelvic pain, the science of pain is expanding every day. Please ask your healthcare team to work with you, using the latest evidence to design an interdisciplinary treatment approach to your pelvic pain.

For more information about other chronic pelvic pain syndromes visit:

International Pelvic Pain Society <u>www.pelvicpain.org/public</u>

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