Pelvic & Reproductive Health

A DIVISION OF THE CANADIAN PHYSIOTHERAPY ASSOCIATION

SPRING 2024 NEWSLETTER

WORD FROM THE CHAIR

Happy Spring, Pelvic & Reproductive Health Division Members!

As I write to you, our division is busy preparing for CPA Congress – an early congress this year has made for a busy spring for our team! If you attended Congress this year, I hope that you found us at our Booth, and came out to celebrate the name change with us.

While we have been preparing for congress, our team has also been working on adjudicating our Bursary applications for 2024. I'm excited to share that we've had significant interest in our Bursary Program this year with nearly 50 applicants! Every year, I get so energized and inspired as I read the bursary applications. It's such a privilege to support your amazing work, and I am thrilled to see this much interest in our programs. Keep your eyes on the e-blasts and on social media for more information on the successful candidates.

I would also like to take this opportunity to invite you to our 2024 Members Meeting! We will be hosting this meeting via Zoom, on Tuesday, May 21st at 8pm EST. I would love for you to join us as we share what we have accomplished this year and discuss the next steps for our newly named division.

As always, thank you for your support of our team and this division.

Alison Gordon, MPT

Chair, Pelvic and Reproductive Health Division of Canadian Physiotherapy Association

(she/her)

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NOTE FROM THE EDITOR

Dear Readers, Happy Spring!

We hope you all had a wonderful time at Congress and are enjoying this lovely weather!

With this edition of the newsletter, we have some really great insight into gastrointestinal concerns and how it relates to pelvic health.

You will also notice that we have an article in both English and French! Thank you Anne-Marie Violette for starting this exciting addition and we look forward to continuing this further for our French members!

Enjoy!

Stephanie Boone, PT
PRHD Newsletter Editor
(she/her)

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COMMON GASTROINTESTINAL AND ANORECTAL CONDITIONS

By Kaeleigh Brown, PT, PhD Candidate (she/her)

Often when I am talking with co-workers, patients, or friends about pelvic health, there is much more awareness about physiotherapy's role in urinary incontinence, prolapse, and pelvic pain than there is about gastrointestinal or anorectal conditions. People can be surprised to learn about our scope in this area. This article will summarize common conditions relating to bowel evacuation, pain, and organ support conditions. For more detailed information, I would recommend referring to the Rome IV criteria, International Continence Society Standards, and UpToDate.

BOWEL EVACUATION CONDITIONS

Conditions under this heading are based on a person's ability to control bowel movements - either to hold in stool until it is appropriate to empty, and/or empty easily and fully.

Constipation is experienced by females more frequently than males, and increases in prevalence after age 65.[1] Functional constipation is diagnosed based on the Rome IV criteria, which requires an individual meet two or more of the outlined criteria.[2] Criteria relate to the ease of having a bowel movement (i.e., straining), stool consistency, sensations related to emptying or blockage, the need for manual support, and bowel frequency.

Anismus and dyssynergic defecation are used interchangeably. Both refer to incoordination of the pelvic floor muscles during bowel evacuation - the pelvic floor muscles paradoxically contract when they should be lengthening to allow for stool to exit the body.[3] It is also diagnosed using Rome IV criteria: with "adequate propulsive forces", the pelvic floor contracts while a person attempts to defecate.[4]

Fecal incontinence is defined by the International Continence Society as the "complaint of involuntary loss of feces.- when feces is solid and/or- when feces is liquid",[5] and defines anal incontinence as the "complaint of involuntary loss of flatus or feces".[6] In the literature, women experiencing fecal incontinence have expressed their preference for the term accidental bowel leakage.[7] In the U.S.A, the prevalence of annual fecal incontinence episodes experienced by women is approximately 19%,[7] with close to 40% of those women reporting severe negative impacts on quality of life.[8]

PAIN CONDITIONS

Pelvic pain is a topic that requires its own newsletter. However, this section will describe proctalgia fugax and coccydynia - pain conditions in the anorectal region. As the name suggests, coccydynia (or coccygodynia) is pain in the area of the tailbone (coccyx).[9] It is more common in women than men, and can develop due to a number of causes such as falls, childbirth, prolonged sitting, or age-related changes.[9]

The prevalence of proctalgia fugax varies, depending on the study, affecting up to 18% of the general population.[10] Individuals experience intense, intermittent rectal pain that may be due to muscle spasm, nerve compression, or other factors.[10] Diagnosis is based on Rome IV criteria, of which all items must be met: recurrent rectal pain unrelated to bowel movements, pain that does not occur between episodes, episodes lasting a maximum of 30 minutes, and exclusion of all other causes of pain.[4]

ORGAN SUPPORT CONDITIONS

There are three prolapses related to the anorectal region and gastrointestinal system: rectocele, rectal prolapse, and enterocele. Rectocele (posterior vaginal wall prolapse) is protrusion of the anterior rectal wall into the vagina.[11] Signs and symptoms can include: difficulties having bowel movements, incomplete bowel emptying, constipation, fecal incontinence, and/or sexual dysfunction.[11] Rectal prolapse occurs when the rectum protrudes out of the anus to the exterior of the body.[12] Symptoms can include pain, fecal incontinence, constipation, and bleeding.[12] Enterocele is the prolapse of the small intestine into the vaginal canal.[11,13] Signs and symptoms are similar to rectocele.[11]

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with Shelly Prosko

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Shelly Prosko, PT, C-IAYT
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GASTROINTESTINAL CONDITIONS AND PELVIC HEALTH (ARTICLE IN ENGLISH AND FRENCH)

By Anne-Marie Violette (she/her)

PELVIC PT ROLE IN MANAGEMENT OF GI CONDITIONS

Gastrointestinal problems can affect the entire digestive tract, passing from the mouth to the rectum and the bladder. The severity and treatment of these problems vary and depend on several factors relating to each individual. Although at first glance, discussing gastrointestinal problems may seem awkward, it is necessary and essential to seek professional advice. It is possible to find long-term effective solutions to relieve the condition because we know that untreated gastrointestinal problems may become chronic and can cause significant complications. Most of the time, we hear that gastrointestinal problems are caused by a lack of fibre in the diet, by stress, by certain medications or by pregnancy. This article will shed light on many other possible factors that could explain the symptoms of gastrointestinal problems including pelvic floor dysfunction.

PELVIC FLOOR FUNCTION

The musculature of the pelvic floor influences gastrointestinal health: the urethra and the anal canal pass directly through the pelvic floor to allow urination and bowel movements. Any problem affecting the pelvic floor has the potential to impact the voiding of the bladder and the rectum. It should be noted that not all gastrointestinal problems are caused by the pelvic floor dysfunction. However, many people with a weak or tight pelvic floor may have gastrointestinal symptoms such as constipation or incontinence. In addition, other people with food intolerance, for example, or other digestive issues may find that their symptoms will worsen if they have problems related to their pelvic floor.

The abdominal box: the diaphragm at the top, the abdominal wall at the front, the pelvic floor and the pelvis at the bottom as well as the back's muscle remains the basis of the physiotherapist's analysis and the client's care. This complex must work in synergy through its strength and coordination. The motor control of the muscles of the abdominopelvic complex might have become accustomed over time and may have difficulty relaxing adequately. Breathing mechanics are just as important: breathing will have an impact on pain and the ability to use the thoracic region and the abdominal wall optimally. The physiotherapist can restore muscle synergy and posture if it is not adequate: we seek to relax the pelvic floor muscles during urination or defecation.

ROLE OF PHYSIOTHERAPY AND MANAGEMENT

SCREENING AND ASSESSMENT

The symptoms reported can vary: bloating, constipation, diarrhea, gas, nausea and/or vomiting, heartburn, incontinence, bleeding, stomach pain, etc. Keep in mind that red flags require a medical referral, among others, such as bloody stools, continuous vomiting, severe abdominal cramps, sudden weight loss, night sweats, stabbing pain. Physiotherapists should know the importance of working in close collaboration with the doctor, a gastroenterologist or any other professional in the case.

CONSERVATIVE TREATMENTS AND PHYSIOTHERAPY APPROACH

Improving your gastrointestinal health will have a significantly positive impact on your well-being and quality of life. Specifically, in perineal and pelvic rehabilitation, the physiotherapist can, among other things:

- Education and advice on the problem, impacts, factors, lifestyle habits, defecation habits, including a defecation schedule or routine, etc. The impact of education on the client should not be underestimated: the therapeutic alliance and trust in the physiotherapist-client relationship are strengthened while promoting the client's sense of self-efficacy.
- Nutrition and hydration to improve stool consistency, volume, transit time and defecation schedule.

- Diaphragmatic breathing exercises, visualization and meditation can help with general relaxation and reduce stress.
- Physiotherapy rehabilitation to normalize and optimize muscle function by:
    - Manual therapy techniques to address the abdominal-lombo-pelvic complex.
    - Myofascial and massage techniques.
    - Personalized exercises based on condition.
    - Biofeedback and/or electrical stimulation to help strength, coordination, relaxation and muscle activation.
    - Balloon to work on rectal sensitivity and rehabilitation of dyssynergia.

RÔLE DU PHYSIOTHÉRAPEUTE DANS LA GESTION DES PROBLÉMATIQUES GASTRO-INTESTINAUX

Les problématiques gastro-intestinales peuvent affecter tout le tube digestif, en passant de la bouche jusqu'au rectum et la vessie. La sévérité et le traitement de ces problématiques varient et dépendent de plusieurs facteurs relatifs à chaque individu. Même si à première vue, de discuter de problèmes gastro-intestinaux peut sembler gênant, il est nécessaire et primordial de demander l'avis d'un professionnel. Il est possible de trouver des solutions efficaces pour soulager la condition à long terme parce qu'on le sait, des problèmes gastro-intestinaux non pris en charge se chronicisent et peuvent donner des complications importantes. La plupart du temps, on entend dire que les problématiques gastro-intestinaux sont réveillées par un manque de fibre dans l'alimentation, par du stress vécu, par certaines médications ou par la grossesse. Cet article fera la lumière sur plein d'autres facteurs possibles qui pourraient expliquer les symptômes des problématiques gastro-intestinaux dont une dysfonction du plancher pelvien!

FONCTION DU PLANCHER PELVIEN

La musculature du plancher pelvien influence la santé gastro-intestinale, c'est-à-dire que comme l'urètre et le canal anal passent directement au travers du plancher pelvien pour permettre la miction et la selle, toute problématique affectant le plancher pelvien a le potentiel d'avoir un impact sur la vidange de la vessie et du rectum. Il est à noter que tous les problèmes gastro-intestinaux ne sont pas toujours causés par une dysfonction du plancher pelvien. Toutefois, plusieurs personnes ayant un plancher pelvien faible ou tendu peuvent vivre avec des symptômes gastro-intestinaux comme la constipation ou l'incontinence. De plus, d'autres personnes avec des intolérances alimentaires par exemple ou d'autres

enjeux de digestion peuvent s'apercevoir que leurs symptômes vont s'accentuer s'ils ont des problématiques en lien avec leur plancher pelvien.

La boîte abdominale : le diaphragme en supérieur, les abdominaux en antérieur, le plancher pelvien et le bassin en inférieur ainsi que le dos en postérieur demeure à la base de l'analyse du physiothérapeute et de la prise en charge du client. Ce complexe doit travailler en synergie de par sa force et sa coordination. Le contrôle moteur des muscles du complexe abdomino-pelvien s'est habitué avec le temps et peut avoir de la difficulté à se relâcher adéquatement. La mécanique de respiration est tout autant importante : la respiration aura un impact sur la douleur et sur la capacité à utiliser la région thoracique et les abdominaux de façon optimale. Le physiothérapeute peut rétablir la synergie des muscles et la posture si elle n'est pas adéquate : on cherche à avoir une relaxation des muscles du plancher pelvien lors de la miction ou de la défécation. Parfois, il arrive que ces muscles se contractent au lieu de se relâcher puis puissent empêcher l'évacuation complète et créer de la douleur.

RÔLE DE LA PHYSIOTHÉRAPIE ET PRISE EN CHARGE

Le physiothérapeute oriente ses buts et son plan de traitement selon les objectifs et les attentes du client. La collaboration multidisciplinaire est primordiale afin de répondre à l'ensemble des besoins de la personne.

DÉPISTAGE ET ÉVALUATION

Les symptômes rapportés sont multiples : ballonnement, constipation, diarrhée, gaz, nausées et/ou vomissement, brûlement d'estomac, incontinence, saignement, douleur au ventre, etc. À garder en tête que les drapeaux rouges nécessitent une référence médicale, entre autres, comme des selles sanguinolentes, vomissement continu, crampes abdominales sévères, perte de poids soudaine, sueurs nocturnes, douleur en coup de couteau. Le physiothérapeute doit se rappeler l'importance de travailler en étroite collaboration avec le médecin, le gastro-entérologue ou tout autre professionnel au dossier.

TRAITEMENTS CONSERVATEURS ET APPROCHE EN PHYSIOTHÉRAPIE

L'amélioration de votre santé gastro-intestinale aura un impact considérablement positif sur votre bien-être et votre qualité de vie. Spécifiquement, en rééducation périnéale et pelvienne, le physiothérapeute pourra, entre autres :

- Éducation et conseils sur la problématique, les impacts, les facteurs, les habitudes de vie, les habitudes de défécation, dont un calendrier ou une routine de défécation, etc. Il ne faut pas sous-estimer l'impact de l'éducation chez le client : il y a renforcement de l'alliance thérapeutique et de la confiance dans la relation physiothérapeute-client tout en promouvant le sentiment d'auto-efficacité chez le client.
- Alimentation et hydratation pour améliorer la consistance des selles, le volume, le temps de transit et l'horaire de défécation. Certains médicaments disponibles sans ordonnance peuvent aider.
- Exercices de respiration diaphragmatique, de visualisation et de méditation peuvent aider à la relaxation générale et à diminuer le stress.
- Rééducation en physiothérapie pour normaliser et optimiser la fonction musculaire par :
    - Techniques de thérapie manuelle pour adresser le complexe abdomino-lombo-pelvien.
    - Techniques myofasciales et massages.
    - Exercices personnalisés à la condition.
    - Biofeedback et/ou stimulation électrique pour aider la force, la coordination la relaxation et l'activation musculaire.
    - Ballonnet pour travailler la sensibilité rectale et la rééducation de la dyssynergie.

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Claudia Brown, M.Sc.(P.T.)

Marie-Josée Lord, B.Sc.(P.T.)

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UNDERSTANDING GASTROINTESTINAL CONDITIONS AND THEIR EFFECTS ON PELVIC HEALTH: AN INTERVIEW WITH NATUROPATH AND FUNCTIONAL MEDICINE DOCTOR, DR. SHAWNA DAROU

By Alyssa Brunt (she/her)

About Dr. Shawna Darou, ND

Dr. Shawna Darou, ND is a Naturopathic doctor and functional medicine practitioner. She has a clinical focus on women's health, hormones, fertility, perimenopause & menopause, and cognitive wellness, and has treated thousands of women in her Toronto clinic since 2004.

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COULD YOU TELL US A BIT ABOUT YOURSELF, YOUR AREAS OF FOCUS AS A NATUROPATHIC DOCTOR AND HOW YOU ENDED UP WHERE YOU ARE IN YOUR CAREER?

I'm a naturopathic doctor (ND) and I've been practicing for just over 20 years. Most of my career has had a big focus on women's health, specifically hormones. Initially, my focus was a lot more about fertility but over my career, my focus has seemed to shift and now I work more with menopause and perimenopause. I also get a lot of referrals for chronic complex health conditions - things that people are having a hard time diagnosing - which I think comes with the years of experience. I definitely see a lot of patients who are tired, bloated and stressed. No matter what your focus is as a naturopath, there is always a large amount of those 3 things specifically.

A few years ago, I completed the Functional Medicine Certification through the Institute of Functional Medicine (IFM) in the U.S – largely as a career upgrade. It doesn't change my scope of practice as an ND or what I do as a naturopath but it was a great way to get up to date on all aspects of the newest evidence based complimentary medicine and areas that aren't so much of my focus in treating day to day health (like cardiovascular health and neurological conditions). It continues to allow me to look at our health through a systems approach rather than a symptoms approach.

WHAT ARE THE MOST COMMON GI CONDITIONS THAT YOU SEE IN YOUR PRACTICE AND OF THOSE, WHICH ONES WOULD YOU THINK MOST COMMONLY AFFECT OUR PELVIC HEALTH?

Chronic bloating is definitely number one followed by constipation. Acid reflux, small intestinal bacterial overgrowth (SIBO) and irritable bowel syndrome (IBS) are also very common, however IBD (inflammatory bowel disease) conditions like Crohn's and Ulcerative colitis is not an area I have a major focus on so I usually refer those out when severe.

Constipation has a huge effect on pelvic health because of the holding pattern and tension in the pelvic floor as well as the constant downward pressure on the pelvic floor muscles. SIBO and IBS also have implications on pelvic health. I wouldn't say I see so much from the upper GI issues, but the digestive tract is a long tube so these higher up problems can sometimes affect down below.

> I always say that a lot of my work is pattern recognition and there has definitely been a change in the pattern of what I see since 2020...I'm seeing more chronic constipation, SIBO, and acid reflux that people are having a hard time handling.

DO YOU NOTICE ANY SIMILARITIES OR PATTERNS IN PATIENTS WITH GI CONDITIONS LIKE CONSTIPATION, BLOATING, IBS ETC? (I.E AGE, GENDER, STRESS, DIET, ACTIVITY LEVEL)

I work with almost all women so it's hard to comment on experiences in men. However, stress is always a huge factor. It will alway exacerbate gut issues, and in the past 4 years especially, people have been under a lot more stress and have been a lot less physically active so there's been an exacerbation in more gut issues ranging from constipation to reflux to bloating.

As a pattern, women stuck in under-eating, fasting, and/or carb restriction often experience more chronic constipation which can then affect the pelvic floor. Food sensitivity is also on the rise, which is leading to more reports of bloating and IBS.

I also see a lot of endometriosis patients who have a lot of gut and pelvic floor issues. As endometriosis progresses, lesions around the bowel are extremely common, creating things like really bad pre-menstrual constipation and often severe diarrhea at the start of the period. The recent research on endometriosis is also really fascinating. It now classifies endometriosis as more of an inflammatory and immune-mediated condition rather than a hormonal condition. Studies are highlighting a huge gut-pelvic floor connection, with research showing a link between gut bacteria in the pelvic cavity creating the inflammatory response.

During peri-menopause and menopause, typically whatever was going on with your health before seems to get bigger. If your problems were IBS and constipation, those issues are going to get bigger and harder to handle. There is also more strain through the pelvic floor post-menopause given the changes we see, specifically thinning tissues and weakened muscles. The muscle tone and any underlying muscle imbalances are going to be more strained. I've seen a pattern of people who had episiotomies tend to have more pelvic floor issues around menopause- possibly because there is an underlying weakness that was never corrected, especially if they didn't have bladder issues postpartum and do pelvic physiotherapy immediately after birth.

I also find that athletes experience a lot more gut and pelvic floor issues post-menopause probably because they are putting a lot more pressure through it. I am a runner myself, and in that population you see/hear a lot about fecal incontinence with running around menopause and peri-menopause but they don't often know of the connection between their symptoms and the pelvic floor.

FROM A NATUROPATHIC PERSPECTIVE, WHY IS IT IMPORTANT THAT PEOPLE ADDRESS CONSTIPATION, IBS, BLOATING, INCONTINENCE ETC SOONER RATHER THAN LATER? WHAT ARE THE LONG-TERM EFFECTS ON THE BODY AS A WHOLE AND ON THE PELVIC FLOOR?

Chronic pressure, holding patterns and tension all have long-term implications that can affect posture, body mechanics and more, but that's more of the pelvic physiotherapists scope. As a naturopath, long-term gut issues create long-term inflammation issues. In naturopathic medicine, we talk a lot about the gut as being the source of systemic inflammation, where immune dysregulation comes from, where issues like rosacea, eczema, and acne could be stemming from, or where autoimmune conditions could be triggered from. Joint pain also gets worse when the gut is out of balance. It's a source of systemic inflammation that will hit wherever your body has a susceptibility or a weakness and that's what we want to address.

> "The role of stress in gut health is huge and it is overlooked the most. Go go go is our cultural norm. People aren't aware of the signs of chronic stress."

AS SOMEONE WHO HAS WORKED WITH GI CONDITIONS FOR A LONG TIME, ARE PEOPLE AWARE OF THEIR PELVIC HEALTH AND HOW CERTAIN CONDITIONS CAN BE INFLUENCED BY OR NEGATIVELY AFFECT THE PELVIC FLOOR? DO THEY DISCUSS THEIR PELVIC SYMPTOMS WITH YOU?

Unfortunately no, I usually educate my patients. Most people don't link their symptoms together except in endometriosis where they are aware they have symptoms in multiple areas although they still don't really make the connection - they just think that they have symptoms in various parts of the body. It's on me to educate people about pelvic health. There is more awareness of the pelvic floor in postpartum issues like urinary incontinence. Again, post-menopause there is a lot going on with the pelvic floor - most women will describe vaginal dryness, pain with intercourse and frequent urination at night but women aren't usually well educated on what they can do about it. I'm still surprised when people are shocked to find out there is something that they can do about their pelvic floor symptoms.

HAVE YOU SEEN AN INCREASE IN THE NUMBER OF PEOPLE WHO EXPERIENCE GI CONDITIONS IN THE PAST FEW YEARS? IF YES, ANY IDEAS AS TO WHY?

I always say that a lot of my work is pattern recognition and there has definitely been a change in the pattern of what I see since 2020. Have gut issues changed? Maybe. People are very stressed so if your gut was a weak spot before then it seems to be a lot worse. I'm seeing more chronic constipation, SIBO, and acid reflux that people are having a hard time handling. Symptoms aren't going away a month after a flare up as they normally would and the things people were doing to manage their IBS or bloating or constipation aren't working anymore.

As I mentioned before, there were big changes in eating habits, activity levels and stress levels in the past few years. These all have a ripple effect on health and the gut is an area that that can have a really profound effect on. You're going to see the downstream effect of that in terms of pelvic floor dysfunction, autoimmune issues and skin issues that are then going to be sparked by the gut running out of control for a few years. Fortunately, all of these things are reversible and treatable but what's different now is that I talk a lot more about nervous system regulation and stress reduction and that as a huge pillar in people resolving gut issues. I wouldn't say it's just an awareness of our gut that is making me see these things more- it's definitely a pattern. I talk to a lot of women in a week and the patterns have shifted and it's kind of fascinating.

DO YOU BELIEVE OTHER HEALTH PROVIDERS (UROLOGISTS, GASTROENTEREOLOGICS, GYNECOLOGISTS, COLORECTAL SURGEONS ETC) ARE ADDRESSING PELVIC FLOOR COMPLAINTS RELATED TO GI CONDITIONS IN THEIR DAILY PRACTICE?

Unfortunately, it's not usually well integrated. I don't have that many conversations with specialists but it's something that I find myself educating people on a lot. When working with patients, my scope is to look at the function of the body but there are also how the structure interconnects with that. As I don't deal with structure, I'll refer to physiotherapy, osteopathy or other manual therapies because it's not my areas of focus. I always keep reminding myself that there are structural parts to these conditions as well.

> I'm still surprised when people are shocked to find out there is something that they can do about their pelvic floor symptoms.

WHAT ASPECTS OF TREATMENT DO YOU FEEL ARE OFTEN MISSED OR OVERLOOKED IN TREATING THESE CONDITIONS?

Stress. The role of stress in gut health is huge and it is overlooked the most. Go go go is our cultural norm. People aren't aware of the signs of chronic stress (cold hands/feet, chronic headaches, IBS, increased pain sensitivity, blood sugar issues, anxiety, sleep troubles, an inability to sit down and relax etc). People aren't aware that their nervous system is out of balance and that they are stressed. Additionally, we often aren't looking at the whole body. I look at the body as interconnecting systems. Bladder health, gut health and nutrition are all connected to me, they aren't separate issues. The microbiome is also an area that is often overlooked as well as the role of movement and exercise in gut health. Movement is important to consider given it's link with pelvic health, muscle balances and more. Endometriosis is also a condition that is commonly under-diagnosed which often leaves people suffering for years, even though the signs are there.

> During peri-menopause and menopause, typically whatever was going on with your health before seems to get bigger. If your problems were IBS and constipation, those issues are going to get bigger and harder to handle.

IN YOUR OPINION, WHAT IS THE ROLE OF PHYSIOTHERAPISTS IN TREATING PATIENTS WITH GI CONDITIONS? ARE THERE ANY ADJUNCT THERAPIES THAT SHOULD BE CONSIDERED WHEN TREATING GI CONDITIONS?

Like I said before, there is often a structural side to some GI issues like the pelvic floor and constipation, hiatal hernias and acid reflux. Where are the holding patterns, areas of weakness or tension? Tension in the pelvic floor, lower back, diaphragm and even the shoulders can affect the gut. Even with recurrent UTIs- I always refer to pelvic physiotherapy. I can work with the antibiotic resistance, the immune system and building the body back after the inflammation but if you don't deal with structure and those holding patterns, it's just going to come back. Pelvic physiotherapy is an integral part of chronic gut issues and bringing awareness with patients through referral is very useful. I'll also refer to acupuncturists, osteopaths, nutritionists, and physiotherapists.

In post-menopausal women, the pelvic floor should always be addressed. We are often used to referring for pain with sex or urinary incontinence but I also think that the gut changes need a pelvic floor referral as well. Again, with the post-menopausal runners who experience fecal incontinence, they'll come to me to discuss what to eat to reduce their symptoms but they don't think of the pelvic floor as something being related.

Pelvic physiotherapy is also really important when working with children who have GI conditions like constipation and encopresis. The function of the pelvic floor is huge in children who withhold. I do believe there needs to be much more awareness in the structural role of that in children.

> **"The recent research on endometriosis is also really fascinating...Studies are highlighting a huge gut-pelvic floor connection, with research showing a link between gut bacteria in the pelvic cavity creating the inflammatory response."**

IS THERE ANY OTHER INSIGHT/INFORMATION YOU'D LIKE TO SHARE WITH OUR READERS?

Look at the whole body. In any form of medicine, we have our own lens and expertise and it only goes so far. That's why I always refer when needed, and try to remind myself if I need to look at the structural pieces as well. Look at the function, look at the stress, look at the hormones. They all interconnect. When hormones change, structure changes- we see thinning tissues, weakened muscles, weakened tendons. When stress is too high for too long, we see chronic holding patterns in the muscles. In the function of things, my focus – what are people eating and how are they digesting, how are the hormones working. It's important to look at all of the pieces because they interconnect. If you get stuck on a case and things aren't improving, that's when you look at another one of those pieces and see what else is interfering.

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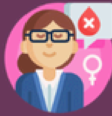

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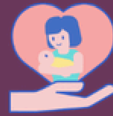

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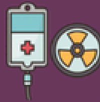

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THE USE OF ELECTRICAL NERVE STIMULATION FOR THE TREATMENT OF FECAL INCONTINENCE AND FUNCTIONAL CONSTIPATION

By Katie Kelly, PT (she/her)

Recent success with surgical sacral neuromodulation in the management of bowel disorders has led to a renewed interest in the possibility of electrical physical agents providing a similar, but less invasive benefit. Gastro-intestinal conditions like fecal incontinence and functional constipation are being treated with modalities such as transcutaneous electrical nerve stimulation (TENS) and percutaneous nerve stimulation (PNS). The following is a brief discussion of the literature.

Electrical nerve stimulation has been utilized in the treatment of fecal incontinence, since Shafik et al, described percutaneous tibial nerve stimulation in 2003.[1] PNS uses a small needle inserted into the posterior tibial nerve near the medial malleoli and 10 cm cephalad to the medial malleoli. The posterior tibial nerve arises from the L4-S3 nerve branches, containing both sensory and motor fibers. While the mechanism of action is not fully understood, theoretically stimulation of peripheral fibers near the ankle causes a retrograde impulse to the sacral nerves generating neuromodulation of the rectum and anal sphincters.[1] This may strengthen the myogenic response to rectal distension.[2] TENS over the posterior tibial nerve has also been suggested as an effective treatment, with the advantage of not needing to insert a needle. Suggested parameters for both therapies vary between a frequency of a 10-20Hz, and pulse width of 200-250 μs and amplitude sufficient to create a twitch response that is tolerated by the patient, for 20–30-minute daily sessions, for 4 to 6 weeks.[1,2,3]

Research investigating these treatment methods demonstrate conflicting results. A 2019 systematic review and network meta-analysis demonstrated improved Fecal Incontinence Quality of Life questionnaire scores in the embarrassment domain with TENS treatment over the posterior tibial nerve.[4] However, a randomized control trial comparing percutaneous and transcutaneous electrical nerve stimulation versus sham TENS demonstrated a reduction in fecal incontinence events, and longer fecal urge delay with only the PNS treatment method.[5] Results from the multicentre RCT CONFIDeNT trial reported no significant clinical of PNS over sham treatment.[6] A 2023 systematic review and meta-analysis reported similar findings of somewhat conflicting results among studies.[7] However, their observed benefits of less frequent fecal incontinence, improved sphincter resting tone, increased anal sphincter contraction and improved questionnaire results support TENS and PNS as a potentially beneficial and safe treatment method for fecal incontinence, despite low quality overall evidence.[7]

More recently, researchers have been investigating if similar applications of neuro stimulation might be of benefit for functional constipation disorders, though the evidence is less abundant. Functional constipation includes normal transit constipation, slow transit time, and rectal evacuation disorders like dysynergic defecation. A low-quality study in 2014 demonstrated significant increase in frequency of bowel movements per week, and improved constipation assessment scale scores with TENS applied over the S1-S4 area, at 50Hz, for 20-minutes, 3 times a week, over a 6-week course.[8] In 2020 Southwell et al, performed a review of meta-analyses and surmised that there is low-quality evidence supporting low-rate TENS over the S1-S2 region to be of benefit for constipation in pediatric patients who experience urinary tract dysfunction, and adult populations who have multiple sclerosis.[9]

TENS over the posterior tibial nerve is also used as a treatment for functional constipation. In 2022 a small study was done

using bilateral tibial nerve stimulation with a frequency of 10 Hz, pulse width of 200 μs, for 30-minutes, 3 times a week for a duration of 6 weeks.[10] Results demonstrated decreased time spent on toilet, a reduction in the use of stool softeners, and improved Constipation Severity Instrument scores with effects persisting for 6 weeks beyond the treatments.[10] Another small but recent study in 2023, examined a pediatric population.[11] Low-rate TENS (10Hz, 200μs) was applied to the posterior tibial nerve for 30 minutes daily, for 2 weeks. The vast majority of participants experienced improvements in stool consistency, blood present in stool, abdominal pain, and fecal incontinence events related to constipation.[11] Certainly larger RCTs should be performed in an attempt to replicate these findings. The Academy of Pelvic Health Physical Therapy, a division of the American Physical Therapy Association, provided clinical practice guidelines for the management of functional constipation in 2021– a great read if you have the time![12] They conclude that the evidence for the benefits of TENS was weak, but a possible adjunct to other, more established treatment methods for functional constipation.[12]

Certainly, it seems that more rigorous studies are needed before we can unequivocally state the usefulness of electrical nerve stimulation for the treatment of fecal incontinence and functional constipation. However, to date it seems that these treatment methods are low-risk and safe barring standard contraindications, for bowel disorder patients. I, for one, agree with the position stand of the APTA, in that they could serve as an adjunct to other treatment methods and be considered as a useful tool in a robust physiotherapy treatment program.

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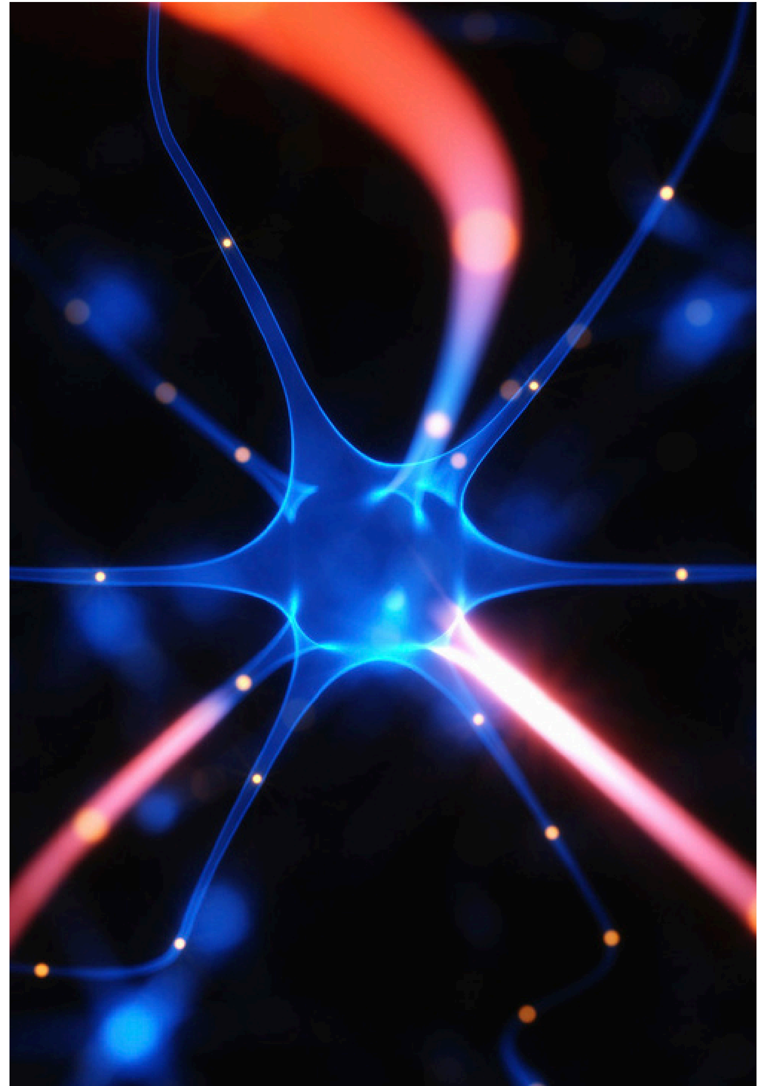

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