



WOMEN'S HEALTH

## Addressing Pelvic Floor Dysfunction

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The pelvic floor is the layer of muscle and fascia at the base of the pelvis. These muscles include the obturator internus, levator ani (iliococcygeus, puborectalis, deep transverse perineal, pubo-analis, pubococcygeus, iliosacralis), coccygeus, piriformis, and the sphincters.

Together the action of these muscles is to support the pelvic viscera; contribute to continence and sphincter muscle control; contract with the abdominal muscles and diaphragm to raise intra-abdominal pressure (coughing, vomiting and forced expiration); and direct the fetal head into the pelvic outlet during parturition. The coccygeus can become involved in inspiration and pull the coccyx forward following defecation and parturition.

The innervation of the pelvic floor includes the pudental nerve and branches from the sacral plexus (S3 to S4); the piriformis and obturator internus are supplied from the ventral rami of L5, S1 and S2. Knowing this helps point us to specific analysis and adjustments of vertebral segments for nerve optimization.

Causes and Prevalence



One in every four women has pelvic floor issues. Common causes of pelvic issues are carrying a heavy load during pregnancy, and hours of laboring and pushing. Aging alone can contribute to pelvic floor problems. Most women I see with pelvic floor issues are over age 40, but more and more, younger women are talking about it. It's not unusual for women to have the problem for a long time.<sup>1</sup> And studies show 25-40 percent of women have poor awareness of how to exercise the pelvic floor muscles and contract them properly.<sup>2</sup>

Incontinence is one of the most common complaints and can be related to giving birth. Even women who have never been pregnant or given birth can become incontinent. Another risk factor for incontinence is being overweight (especially obesity), and it may be related to the amount of sitting we are doing.

Urinary incontinence can be termed *stress incontinence* when coughing, sneezing or exercise cause urine to leak out. Urgency incontinence is when you need to go to the bathroom right away because the bladder contracts inappropriately and needs relaxation. Urgency incontinence may be helped by behavioral therapy, medications and/or natural phytonutrients. Some women have opted for botox injections to help relax an overactive bladder. This may last six to nine months and then recur.

Another problem is prolapse, which is when organs in the pelvis – such as the uterus or bladder – droop or bulge out of place into the vagina. I remember one of my first female patients when I was a chiropractic intern over 40 years ago had a "pessary." These are still used today.

Why Not Chiropractic?

Some women seek the help of a gynecologist, urologist, gastroenterologist, physical therapist, or colorectal specialist; but few think of a chiropractor for a pelvic floor condition. That needs to change! (By the way, it is not my intention in this article to have a dialogue about the male doctor

treating the female pelvic floor, although I think our state and national boards need to have a panel discussion on this topic.)

### Current Non-Invasive Treatments

*Adjustments and manipulation.* Check the interpubic area (disc, ligaments), innominates, sacrum, and coccyx. I check the soft tissues and fascia of the abdominal wall to the pubis; and the piriformis attachments from the hips to the sacrum and coccyx. The genital hiatus and vaginal areas could be a part of the evaluation.

*Kegel muscle electrical stimulators.* These are designed for internal and external use. I don't have enough experience with these to pick favorites.

*Strengthening the muscles in the pelvic floor.* Exercises that activate and tighten the thighs, buttocks and lower abdominal muscles are important. Exercises that strengthen the core and pelvic muscles need to be simple, effective and streamlined.

### Tucker's Top 3 Pelvic Floor Exercises

- Modified planks on hands and toes; lift knees.
- Cobra position on forearms; abduct thighs as far as possible, bend knees 90 degrees, push the heels together (against each other).
- Connect the diaphragm and pelvic floor through breathing exercises while doing Kegels. I spend time helping patients gain awareness of their internal environment and create biofeedback sensations.

I instruct patients to perform fast and slow contractions because the pelvic floor is made up of two different types of muscle fibers:

*Fast contractions* - contract the muscles and then let go fully. Do not hold the contraction. Repeat for 10 consecutive repetitions.

*Slow contractions* - contract the muscles and hold this contraction for 10 seconds, then relax fully. Repeat for 10 consecutive repetitions. Once able to perform this 10x10 second routine, try to hold the contraction for longer and build up to one minute.

### Tucker's Top In-Office Therapies

My top two in-office therapies for pelvic floor dysfunction are:

*High-energy inductive therapy (HEIT).* It takes a high-energy Tesla device to stimulate the muscles I want patients to feel. Lower-energy *peripheral electromagnetic frequency (PEMF)* may not stimulate pelvic floor muscles. HEIT helps increase the microcirculation, as well as decrease inflammation around nerves that may be irritated in the pelvic floor area.

*Transfer energy capacitive and resistive (TECAR) therapy.* I have implemented this new radiofrequency therapy into my practice. It is unique in that it can target different tissue types, especially the nociceptors, fascia and deeper structures. I also like that it stimulates metabolism, increasing the healing process. It allows me to couple hands-on therapy (using bracelets around the forearms) with a warming sensation through my hands into the patient's tissues.

Specialized soft-tissue therapy complements manipulation, and helps the nerves and blood vessels that control pelvic floor muscles and fascia.

Other potentially useful therapies include red light therapy, shockwave, whole-body vibration, and lymphatic cupping. Most importantly, if the patient is overweight, help them figure out how to lose the excess weight. In my office, I use the ketogenic diet.

Continued pain in the pelvis can be coming from myofascial pain, scar tissue, endometriosis, the pubic symphysis, SIJ, coccyx, bladder, bowel, spinal misalignments, pelvic floor muscles or nerves. Chiropractic may help soften scar tissue, and a skilled practitioner can definitely help patients strengthen the pelvic floor muscles.

### *References*

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2. Lee DG. New perspectives from the integrated systems model for treating women with pelvic girdle pain, urinary incontinence, pelvic organ prolapse and/or diastasis rectus abdominis. *J Assoc Chiropr Physiother Women's Health*, 2014;114:10-24.

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