

MUSCULOSKELETAL PAIN

Pelvic Pain and Rehab

Kim Christensen, DC, DACRB, CCSP, CSCS

One of the major reasons patients seek chiropractic care is for pelvic and related lower back pain. For

example, chronic pelvic pain affects as many as 15 percent of adult women.¹ The pelvis and lower back bear much of the body's weight, which is why they are common pain sites. In addition, this area, along with the lower extremities, is involved with the complicated biomechanics of movement (walking and running) and stationary support (standing and sitting).

Pain From Imbalance

Postural imbalance causes stress on muscles and joints; therefore, poor posture can aggravate pelvic and back pain. Poor posture can also cause increased fatigue and makes patients more prone to injury because of altered biomechanics. Some of the most common signs of poor posture include a forward head, rounded shoulders, arched lower back, and excessive pelvic tilt.

One easy postural test (lateral view) starts with your patient's head, back, buttocks, and heels making contact with a flat vertical surface (wall or locked door). Slide your hand between the patient's lower back and the wall, and then between the neck and the wall. There should be an inch or two between the lower back and the wall, and two inches between the neck and the wall. Next, have the patient take a couple of steps while keeping the posture that was formed during the wall test. This is one technique to teach improved upright and walking posture.

If postural improvement is advised, start with a pedal examination - shoes and feet. Look at the patient's shoes and note any excessive patterns of wear. Look at his or her bare feet and measure the arches in a sitting and then in a standing position. If there is a significant difference, the patient probably has a pronation problem, and custom-made stabilizing orthotics should be recommended.

Also consider the effects of heel-strike shock on the pelvis. Shock forces are transmitted up the heels and through the pelvic joints. Orthotics designed to significantly decrease the amount of heel-strike force may be appropriate.

Fit to Sit

A study by Koo, et al.,² on the effects of sitting posture considered possible methods to improve conditions for paraplegics and others dependent on wheelchairs. The researchers measured the amount of pressure on the ischial tuberosity and orientation of the pelvis when sitting on different types of cushions. A foam cushion composed of many individual foam cells significantly reduced ischial pressure and improved pelvic posture.

Strength at the Core

The term "core strength" is a key concept in the contemporary health and fitness industry. The "core"

is the origin of movement. A strong core represents stability - of the spine, pelvis, shoulders, neck, and torso - for effective locomotion. People with pelvic and low back pain usually have deconditioned core musculature, which interferes with postural stabilization.

The Pilates method of core conditioning is currently performed by millions of adherents in America.³ This method, developed in the 1920s by Joseph Pilates, is a resistance-control exercise of stretching and strengthening movements. Pilates exercises are effective, and when combined with rehab programs using surgical tubing exercises, are easy to demonstrate and can be performed at home.

Pelvic Influences Above and Below

Adjustments to the sacroiliac are thought by many to directly influence pelvic care. However, when

Pollard and Ward⁴ compared the effectiveness of an upper cervical manipulation and a manipulation of the sacroiliac joint on hip range of motion (ROM), they determined that a single manipulation of the first cervical vertebra improved ROM. By contrast, a single manipulation of the sacroiliac joint did not significantly increase ROM.

A 1997 study⁵ that examined the biomechanics of the sacroiliac joints found that the use of heel lifts and orthotics to level the sacral base, along with adjustments, was superior to adjustments alone. Rehabilitative exercises, stretching, and stabilizing belts were also recommended.

Ostagaard, et al.,⁶ reported that 47 percent of pregnant woman experience significant back or posterior pelvic pain during pregnancy. The use of a sacroiliac belt helped a majority of the women with posterior pelvic pain, and those who exercised at least 45 minutes per week prior to becoming pregnant had decreased sick leave.

Floor Routines

Don't neglect discussing the organs of the pelvic cavity during patient exams. Millions of people are affected by urinary incontinence, due to a variety of reasons or causes: from bladder infection, obesity, childbirth, and neuromuscular disorders, to the aging process. Pelvic floor exercises are effective for

many women with postpartum urinary incontinence,⁷ and also for men who develop urinary

incontinence following prostatectomy.⁸

The pelvis is an important link between the torso and the lower extremity. When treating patients with complaints in the pelvic area, it is important to consider all of the various potential sources.

References

- 1. Samraj GP, Kuritzky L, Curry RW. Chronic pelvic pain in women: evaluation and management in primary care. *Compr Ther* 2005;31(1):28-39.
- 2. Koo TKK, Mak AFT, Lee YL. Posture effect on seating interface biomechanics: comparison between two seating cushions. *Arch Phys Med Rehab* 1996;77(1):40-47.
- 3. Blum CL. Grace under pressure. Newsweek, Feb. 28, 2000;135(9):72-73.
- 4. Pollard H, Ward G. The effect of upper cervical or sacroiliac manipulation on hip flexion range of motion. *J Manip Physiol Ther* 1998;21(9):611-617.
- 5. Harrison D, Harrison D, Troyanovich S. The sacroiliac joint: a review of anatomy and biomechanics with clinical implications. *J Manip Physiol Ther* 1997;20(9):607-617.

- 6. Ostagaard HC, Zetherstrom G, Roos-Hanson E, Svanberg B. Reduction of back and posterior pelvic pain in pregnancy. *Spine* 1994;19(8):894-900.
- 7. Harvey MA. Pelvic floor exercises during and after pregnancy: a systematic review of their role in preventing pelvic floor dysfunction. *J Obstet Gynaecol Can* 2003;25(6):487-498.
- 8. Galeri S, Sottini C. Physiotherapy of pelvic floor for incontinence. *Arch Ital Urol Androl* 2001;73(3):143-146.

Kim Christensen, DC, DACRB, CCSP, CSCS Director, Chiropractic Rehabilitation and Wellness Program PeaceHealth Hospital Longview, Washington kchristensen@peacehealth.org

JUNE 2005

©2024 Dynanamic Chiropractic[™] All Rights Reserved