Physical Therapy Assessment & Treatment of Pelvic Dysfunction
Bonnie Cardenas P.T., C.F.P.

Cardenas & Associates
Physical Therapy
12660 Riverside Drive
Suite 215
Valley Village, Ca. 91607

Cardenaspt@earthlink.net
Why Physical Therapy?

To manage and resolve pain
To improve strength
Resolve urinary issues
Resolve bowel issues
Regain organ support
To restore function and quality of life
A Sample of Diagnoses for Physical Therapy Management

- Vulvodynia
- Vulvar Vestibulitis
- Dyspareunia
- Vaginismus
- Sexual Dysfunction
- Post-Surgical (hysterectomy, laproscopy, C-section)
- Endometriosis
- Organ prolapse
- Pelvic Floor Weakness
- Urinary Incontinence, Stress or Urge
- Fecal Incontinence
- Urinary retention
- Levator Ani Syndrome
- Interstitial Cystitis
- Urethral Syndrome
- Frequent UTIs
- Coccydynia
Functional Problems

- Sexual dysfunction
- Elimination dysfunction
  - urinary frequency, urgency, incontinence, retention, constipation, diarrhea
- Disruption of the digestive system, food intolerances
- Sleep Disturbance
- Postural and movement disorders
  - Sitting restrictions, limited ambulation, limited lifting, bending, squatting
Functional Problems

Clothing Restrictions
Workplace limitations
Emotional impact
Relationship impact
  Limited social interaction
  Limited intimacy
Isolation
Financial Impact
Physical Therapy Assessment

- Before proceeding...
  - Educate patient on anatomy and function of the pelvic region and PT vs. MD examination procedure
  - Treatment Rationale
  - Establish rapport
  - Agreement
Anatomy

From the Physical Therapists point of view...

Functional anatomy
Relationship of structures and function
Coordination
Begin with external evaluation
The Pelvic Girdle

- Approximately 35 muscles attach to the pelvic girdle bilaterally
- Powerful ligaments
- Central to movement
- Houses pelvic organs
- Complexity of the nervous system
Lumbopelvic Structures

- Muscle, joints, ligaments
- Nerves
- Affect the pelvic cavity/organs
- Affect the spine
- Pelvic girdle stability
- Hips
Neurological

- Innervation
  - Peripheral
  - Autonomic
- Proprioception
- Sensation
- Motor control
- Neural Tension
External Pelvic Muscles to Assess

- Thigh muscles
- Abdominals
- Iliopsoas
- Buttocks
- Hip rotators
Intrapelvic muscles - Think layers

- The first layer of muscles palpated
- Urogenital triangle
  - Perineal
  - Bulbospongiosus
  - ishiocavernosus
Procedure

- Determine treatment plan, frequency and duration
- Communication with the referring physician(s) and other members of the health care team regarding plans and progress
- Frequent updates, modification of treatment plans and communication
Pelvic Diaphragm Muscles

- Deep to the urogenitals
- Obturator internus /levator ani connection
- Coordination patterns with the abdominal diaphragm
Assessment Outline

- Subjective Information and Patient History
- Related Signs and Symptoms, contraindications to treatment
- Assessment of Patient’s posture, daily activities and functional demands
- Muskuloskeletal Evaluation of Extrapelvic and Intrapelvic muscles, joints and ligaments
- Neurological signs and symptoms
Patient interview

- Current problem & intensity of symptoms
- Onset and History of the current problem
- Other relevant Medical and Social history
- Functional Assessment (ADL) and Quality of Life
- Vocational abilities/limitations
- Voiding function (urinary & fecal)
- Sexual functioning
- Medications
- Diet and Fluid intake
Musculoskeletal Evaluation (1)

- Consider the whole person for good physical therapy assessment
- Posture Assessment
  - Standing
  - Sitting
- Movement mechanics
Musculoskeletal Evaluation (2)

- Range of motion: hips, spine, pelvic joints
- Flexibility
- Pelvic girdle symmetry or asymmetry
- Movement patterns-coordination
- Gait
- Abdominal strength and coordination testing
- Pelvic floor muscles
Connective Tissue Exam Extrapelvic

- Connective tissue observation
  - Skin condition
  - Extensibility of connective tissue
  - Edema and congestion
  - Scar tissue
  - Nodules
Extrapelvic Muscle Assessment

- Quadriceps, tensor fasciae latae and iliotibial band, thigh adductors, hamstrings
- Abdominals
- Diaphragm
- Iliacus and psoas
- Gluteal muscles
- Deep hip external rotators (e.g. piriformis)
- Lumbar muscles
Assessment- Pelvic Girdle

- Joint integrity
  - Sacroiliac
  - Pubic Symphysis
  - Sacrococcygeal
- Ligamentous stability
- Position
- Mobility
- Sensation
Muscle Palpation

- Check for tone, trigger points, edema, scarring, adhesions
- Check strength if tolerated
- **Urogenital muscles**
- Often tense and painful
- Techniques used to avoid shear on the tissues and irritation
Pelvic Diaphragm Palpation

Flexibility, tonus, trigger point irritability or pain, coordination, strength

Pubococcygeus
Iliococcygeus
Coccygeus
Obturator
Internus
Common Findings (1)

- Poor posture and body mechanics
- Limited connective tissue mobility
- Painful muscle trigger points extrapelvic and intrapelvic muscles
- Referral of pain to other structures
- Nervous system irritability
- Altered sensation, proprioception
Common Findings (2)

- Edema, congestion pelvic structures
- Abdominal bloating
- Reduced synergy abdominal, back, hip and pelvic floor muscles.
- Loss of functional strength, coordination in the lower trunk, including pelvic floor
Contributes to...

- Pelvic girdle, spinal instability
- Poor support for the organs, prolapse
- Chronic muscle tension
- Poor circulation and tissue hypoxia
- Compression joint & nervous tissue
- Incontinence, retention
- Sexual dysfunction
- PAIN
- LOSS OF FUNCTION
Functional Consequences

Pelvic Pain Findings and Patient Function

- Trigger point/referred pain
- Nervous system irritability
- Inflexibility, weakness
- Poor muscle recruitment

Reduced sexual function
Digestive disorders
Altered breathing patterns
Voiding difficulties

Difficulty sleeping
Difficulty working
Activities restricted
Emotional distress

Associated Pain
- Hip
- Spinal
- Sacroiliac joint
Treatment-Patient Education

- Discussion regarding findings
- Treatment Plan
- Home program beginning initial visit
- Level of commitment
- Prognosis
Treat the “whole person”

- Avoid thinking of the pelvic floor only
- The pelvic floor does not function solo, complex pattern muscle synergies
- Many of these patients have complex complaints and problems
- Many have been ill and dysfunctional for a long time
Physical Therapy Tissue Release

- Soft tissue release to involved muscles and connective tissue
  - thighs
  - abdominal region
  - hip muscles
  - back
  - intrapelvically
Physical Therapy Techniques

- Soft tissue techniques
  - deep trigger point release
  - reflexive inhibition
  - skin rolling
  - relaxation
  - neuromuscular re-education
  - proprioceptive
- manual biofeedback
Physical Therapy Exercises

**Emphasis on release, functional strengthening, and coordination**

- Exercises
  - Breathing
  - Stretching
  - Strengthening
  - Coordination
Strengthening Exercise

Focus on coordination

Abdominals
Diaphragm
Back, buttock and hip muscles.
Pelvic floor muscles
Physical Therapy Therapeutic Activities

- Posture, body mechanics instruction
- ADL
- Self massage
  - Extrapelvic
  - Intrapelvic
  - Tools
Physical Therapy Neuro Re-education

- Relaxation training
  - Progressive relaxation
  - Deep breathing techniques
  - Feldenkrais- Movement re-education that improves awareness as well as relaxation benefit
Patient Participation

- Progressive home exercise program
- Self massage
- Family education when appropriate to assist with soft tissue release
- Ergonomics instruction to improve tolerance to sitting, and lying
- Tools for exercise and soft tissue release
When appropriate

- Advise re: fluid intake
- Diet (general), referral to a dietician or to a specialist is encouraged
- Avoid irritation from contact with soaps, detergents and clothing
- Inform regarding support and information available
Treatment Response

- Improved posture, and body mechanics.
- Improved muscle, and connective tissue tone.
- Reduced pain to soft tissue palpation.
- Improved circulation.
- Improved strength, coordination and flexibility.
- Reduced complaints of pain.
- Restoration of function.
Functional Outcomes

- Most often associated problems begin to reduce first, for example; back pain
- Voiding function improves
- Improved breathing pattern
- Improved ability to tolerate all aspects of ADL; dressing, eating, sexual activity, work, social activity
- Reduced tension and distress, improved quality of life
Physical Therapy for assessment & treatment of pelvic pain & dysfunction

- Thank you for your attention
- Bonnie Cardenas PT, CFP