Physical Therapy Assessment, Treatment Plan and Multidisciplinary Algorithm

“I already diagnosed myself on the Internet. I’m only here for a second opinion.”
Definitions

- Impairment
  - A loss or sensory abnormality of physiological, psychological, or anatomical structure or function

- Functional Limitation
  - The restriction of the ability to perform- at the level of the whole person- a physical action, activity or task in an efficient, typically expected or competent manner

- Disability
  - The inability to engage in age-specific, gender-specific, or sex-specific roles in a particular social context or environment
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Assessment

- Combine history and physical findings
- List of impairments
- Link impairments to symptoms
- Consider diagnoses
- Consider severity and co-morbidities
- Treatment plan development and goal setting
Multi-Disciplinary Approach

Physical Therapy

Pharmaceuticals

Interventional medicine

Cognitive Behavioral Therapy
Physical Therapy Assessment

- **Impairments**
  - Connective tissue restrictions
  - Myofascial Trigger Points
  - Pelvic floor hypertonus
  - Adverse Neural Tension
  - Structure and mechanics
  - DIAGNOSTIC CONFUSION!!!

- **Diagnoses**
  - Vulvodynia
  - Interstitial Cystitis
  - Chronic pelvic pain syndrome
  - Pudendal Neuralgia
  - High-tone pelvic floor disorder
Impairments

- Connective tissue restrictions
  - Location, severity, neural involvement
- MTrPs
  - Abdomen, gluteals, lower extremities, PF
- Pelvic Floor Dysfunction
  - Length, strength, motor control, tenderness
- Adverse neural tension
  - Pudendal, sciatic, P Fe Cu, ilioinguinal, iliohypogastric
- Structure and mechanics
  - Strength, LLD, SIJD, LBP
Physical Therapy Treatment Plan

- Manual therapies
- Patient education
- Frequency
- Duration
- Home Exercise Program
- Lifestyle modifications
- Partner training
Treatment: Connective Tissue Manipulation

Goals of CTM:
- Improve blood flow
- Restore integrity and mobility
- Decrease ANT
- Eliminate C-V noxious input

Functionally:
- Decrease itching/pain/hypersensitivity
- Restore normal urination, defecation, sexual function
Treatment: Connective Tissue Manipulation

- **Goals of CTM:**
  - Improve blood flow
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  - Decrease ANT
  - Eliminate C-V noxious input

- **Functionally:**
  - Decrease itching/pain/hypersensitivity
  - Restore function
MTrPs Treatment: manual, dry needling, TPIs

- **Goals:** eliminate MTrP
  - Decrease hypertonus
  - Decrease pain
  - Restore normal motor function
  - Decrease S-V noxious input
  - Decrease CT restrictions
  - Decrease ANT
MTrPs Treatment: manual, dry needling, TPIs

- Goals: eliminate MTrP
  - Decrease hypertonus
  - Decrease pain
  - Restore normal motor function
  - Decrease S-V noxious input
  - Decrease CT restrictions
  - Decrease ANT
Pelvic Floor Treatment

- Digital myofascial release (trans-vaginal or trans-rectal)
- Lengthening not strengthening
- Motor control (concentric, eccentric, volitional drops)
- MTrP release
Diastasis Recti Correction

- Slight RA muscle contraction with compression to approximate mm endings
- Other ab work contraindicated until closed
- Binder or tape
- Surgical correction
Diastasis Recti Correction
Adverse Neural Tension Treatment

- Goals:
  - Restore mobility
  - Decrease CT R
  - Decrease pain
  - Improve function and ROM
Structure/Biomechanics Evaluation and Treatment

- Orthopedic manual tests: rotations, flares, upslip, hypermobility
- LLD
- Length and strength of muscles
- Normalize impairments
Case Report: Patient Kelly S.

- 48 year-old female, Oct 2008
- May 2005: symptoms began
  - Urinary hesitancy
  - Interrupted stream
  - Tender in abdomen
  - Constant feelings of ‘having to go’
- Aug 2005: prescribed medication
Case Report: Patient Kelly S.

- Oct 2005: hospitalization for DVT and PE
- Oct 2005: self-catheterization
  - Abdominal/suprapubic pain persisted
- June 2006: laparoscopic: Endo
  - Intestines, bladder
- June 2007: supracervical hysterectomy and bilateral salpingo-oopherectomy
Case Report: Patient Kelly S.

- Sept 2008: evaluation with Urologist
  - Urodynamics and cystoscopy
  - Hypertonic urethral sphincter, iliococcygeus MTrP, normal bladder and capacity
  - Refer to PHRC
Case Report: Patient Kelly S.

- **Physical Therapy IE: Oct 23, 2008**
  - Athletic female
  - Cc: unable to void on own, limited exercise capacity (abd and LB pain), LE numbness, R>L buttock pain when sitting, voiding urge absent
  - PMH: C-section May 1996
  - Medications: macrobid 100mg/day, wellbutrin 100mg/day
Case Report: Patient Kelly S.  
Objective Findings

- Connective tissue restrictions
  - Moderate: suprapubic and abdomen
  - Severe: posterior thigh and gluteal region
- 3 1/2 finger sub-umbilical DR
- MTrPs: RA, gluteus maximus and medius, piriformis
Case Report: Patient Kelly S. Objective Findings

- + ANT on the sciatic nerve
- Internal Examination:
  - Hypertonic pelvic floor muscles
  - Poor motor control: no conc, ecc or drop
  - Severe peri-urethral CT dysfunction
Case Report: Patient Kelly S. Assessment

- DR contributing to PFD
  - No motor control, short pelvic floor, unable to drop to void
- DR causing abd MTrPs
  - Contributing to abdominal pain, back pain, and urinary dysfunction
- Hip ER MTrP contributing to LBP, sciatica
- Sciatica contributing to posterior thigh CT restrictions, leg numbness
Case Report: Patient Kelly S.

**Visits 1-3**
- Patient education
- CTM: abdomen, posterior thigh, glut
- MTrP release: RA, hipe ER
- Int MFR and per-urthral CTM
- HEP: DR correction, PF drops

**Visit 4**: minimal abdominal ‘pressure’, no buttock pain with sitting, no change in ability to void
- Continued manual therapy
- Abdominal tape
Case Report: Kelley S. Treatment

- **Visit 5:** able to void with tape, increased urine stream and observe normal voiding urges (every 4 hours), catheterizing two times per day
  - Abdominal pain gone
  - Abdominal binder
- **Visit 6:** continued improvement in urine stream, minimal hesitancy, no abdominal pain, minimal leg numbness
- **Visit 11:** Catheterizing one time per week, 300 ccs
  - ‘Butt’ pain with exercise
  - Refer to orthopedic PT for supervised, specific strengthening
“If you are stumped, why not write an illegible prescription and hope the pharmacist comes up with something?”
MANAGEMENT OF A PATIENT WITH URINARY, BOWEL, SEXUAL DYSFUNCTION and PELVIC PAIN

PCP, OB/GYN, COLOREC, UROL, ORTHO Work-up

Symptomatic w/o pathology

Symptomatic w/ pathology

Treat pathology

Asymptomatic w/o pathology

D/C

Physical Therapy Evaluation

M/S exam -

M/S exam +

Refer back to MD

Responding

Cannot tolerate PT

Non-Responding

Continue external PT

Responding: progress physical therapy treatment plan

Goals met

Initiate PT and multi-disciplinary treatment plan

PT

P

M

CBT

Monitored by Pain Management
MANAGEMENT OF A PATIENT WITH URINARY, BOWEL, SEXUAL DYSFUNCTION and PELVIC PAIN

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Goals met
Multi-Disciplinary Approach

Physical Therapy

Pharmaceuticals

Interventional medicine

Cognitive Behavioral Therapy
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<th>Disability</th>
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<td>Decreased sitting tolerance</td>
<td>Inability to work</td>
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<td>Urinary urgency and frequency</td>
<td>Inability to attend school</td>
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<td>Constipation and difficulty evacuating</td>
<td>Inability to meet financial responsibilities</td>
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<td>Structural/Biomechanical Abnormalities</td>
<td>Difficulty with ADL’s (cooking, cleaning, driving)</td>
<td>Inability to care for dependants</td>
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<td>Depression and Anxiety</td>
<td>Decreased tolerance for exercise</td>
<td>Inability to engage in intercourse</td>
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Physical Therapy Treatment Plan

- Connective Tissue Manipulation
- Internal and External MTrP Release
- Neural Mobilizations
- Structure and Biomechanical Correction
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PCP, OB/GYN, COLOREC, UROL, ORTHO Work-up

Symptomatic w/o pathology  Symptomatic w/ pathology

Physical Therapy Evaluation  Treat pathology

M/S exam -  M/S exam +  Asymptomatic w/o pathology

Refer back to MD

Initiate PT and multi-disciplinary treatment plan

D/C

Responding  Cannot tolerate PT  Non-Responding

Continue external PT  PT  Responding: progress physical therapy treatment plan

P  M  CBT

Monitored by Pain Management

Goals met
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CBT

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Monitored by Pain Management

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MANAGEMENT OF A PATIENT WITH URINARY, BOWEL, SEXUAL DYSFUNCTION and PELVIC PAIN

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Physical Therapy Evaluation

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Initiate PT and multi-disciplinary treatment plan

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Cannot tolerate PT

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CBT

Responding: progress physical therapy treatment plan

Monitored by Pain Management

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Symptomatic w/o pathology  Symptomatic w/ pathology

Physical Therapy Evaluation  Treat pathology

M/S exam -  M/S exam +  Asymptomatic w/o pathology

Refer back to MD  Initiate PT and multi-disciplinary treatment plan  D/C

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Monitored by Pain Management  CBT  M  P
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Physical Therapy Evaluation

Treat pathology

Physical Therapy Evaluation

M/S exam -

M/S exam +

Refer back to MD

Asymptomatic w/o pathology

Initiate PT and multi-disciplinary treatment plan

D/C

Responding

Cannot tolerate PT

Non-Responding

PT

P M

CBT

Responding: progress physical therapy treatment plan

Monitored by Pain Management

Goals met

Physical Therapy
Pharmaceuticals
Medical intervention
Cognitive Behavioral T.
Patient Tracy H.

- 43 year-old female
- Spring 2001: urinary frequency
  - Vaginal numbness, pain in ‘sits bones’
  - Diagnosis with LA Syndrome
- May 2001: PT (biofeedback and kegals)
  - Vaginal pain, burning, dyspareunia, rectal pain
  - Diagnosed with Vulvodynia
- Aug 2001: 2 sets of 3 injections into vestibule
  - Increased pain
  - Declined vestibulectomy
Patient Tracy H.

- **Aug 2002: forced to stop working**
  - Severe burning in her vagina, buttocks, and posterior thighs
  - Voiding every 15 minutes
  - Relief when supine and for 20 minutes after BM, then increase in symptoms
  - Bilateral groin pain
Patient Tracy H.

- Dec 2002: Back specialist in NYC
- Feb 2003: Vulvodynia specialist in NYC
  - Did not do pelvic exam, suggested biofeedback, stretching with ‘baby penises’, and 2 orgasms per week
- May 2003: Vulvodynia specialist in S. CA
  - 3 PNB per vagina
- June 2003: Anodyne
- Nov 2003: PN decompression/transposition in Nante, France
- Nov 2004: evaluated in SF
Patient Tracy H.

- Objective findings
  - Severe connective tissue restrictions
    - Lower extremities, abdomen, gluteal region, bony pelvis (PN territory)
  - Myofascial Trigger Points
    - Adductors, all hip ER, RA, HS
  - Adverse Neural Tension
    - (+) sciatic, P Fe Cu, 3 PN branches
  - Severe vestibule TTP
    - Could not tolerate PF internal examination
  - SIJD secondary to ST/SS severing and no rehab
Patient Tracy H.

- **Assessment:** Severe myofascial pelvic pain syndrome and pelvic instability
- **Plan:** Local PT (Seattle), follow up in SF every 4 months
- **1 year of PT 2xs/week**
  - Urinary, bowel dysfunction resolving
  - Pain improving, however cannot tolerate weight-bearing exercise, sitting, no attempt at intercourse, clothing intolerance
Patient Tracy H

- **2006: monthly visits to SF** - 4 hours/visit
  - Cannot tolerate int MFR
  - PNB - increase in pain for 2 weeks, no change after
  - Improving slowly
- **2006: weekly visits to SF**
  - 4 hours PT/week
  - Dry needling with our local MD
Patient Tracy H.

- **2007: Continued improvement**
  - Can tolerate all clothing
  - Sitting tolerance 3 hours with cushion
  - Has not attempted intercourse
  - Increase in symptoms post-exercise
    - Urinary frequency
    - Burning in perineum
    - Burning in P Fe Cu Nerve distribution
Patient Tracy H.

- **Objective findings**
  - Minor PFD
  - Connective tissue restrictions in vulva, PN territory, P Fe Cu area
  - Persistent OI MTrP
- **June 2008: selective PF botox**
  - Result: decreased PF pain
  - Burning post-exercise persisted
  - Uncontrolled flatulence 3 months
Patient Tracy H.

- Aggressive CTM, manual MTrP rls, int MFR
- Oct 2008: attempt cymbalta, increase in Lyrica
- Continued improvement, began using dilators for vulvar de-sensitization
- January 2009: intercourse
- March 2009: decrease freq of visits
Utilization of Physical Therapy

- Refer to PT if patient presents with pelvic pain, urinary, bowel, and/or sexual dysfunction in absence of other pathology
- www.apta.org
- www.pelvicpain.org
- www.nva.org
Questions? THANK-YOU!!!!

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