Chronic Pelvic Pain

Manu Mathews MD, FIPP
Cleveland Clinic Foundation

Definition

- A chronic pain disorder of >6 months duration
- Present at least 2 weeks of every month
- Misdiagnosis or lack of diagnosis is common
- Only 50% of patients actually receive a diagnosis
- 34% have had at least one diagnostic procedure
- 20% have never had any investigations
Scope of the Problem

- Prevalence: 38/1,000 in primary care populations (asthma is 37/1,000)
- Up to 15% of women may meet the diagnostic criteria (incidence)
- Accounts for 10% of referrals to gynecologists
- 40% of laparoscopies performed by gynecologists are for chronic pain

Scope of the Problem

- Affect 15% of women ages 18-50 years
- 9 million women
- 30% seek medical help (3 million)
- A large % also seek non traditional care
- Accounts for 10% of all referrals to gynecologists
- 70,000 hysterectomies/yr
- 400,000 laparoscopies/yr
Common factors

- Rarely is it from a single organ.
- Usually a pain syndrome than a single disease.
- Limited correlation of Pathology and pain.
- Neurobiological syndrome.
- Psychosocial component is common.

Innervation of Pelvic Floor

- Nerve roots: S2-4
- Pudendal nerve
- Sympathetic plexus:
  - Hypogastric Plexus
  - Ganglion Impar
  - Celiac Plexus
- Parasympathetic
  - Splanchnic and vagus
Sources

- **Visceral sources**
  - Uterus, fallopian tubes, ovaries
  - Bladder, GI tract, Peritoneum
  - Blood vessels

- **Somatic Sources**
  - Muscles of pelvic floor and abdominal wall
  - Bone

- **Neuropathic sources**
  - Central and peripheral nerves
  - Sympathetic nerves
  - Pelvic viscera
  - Blood vessels

Contributors

- **Psychosocial phenomenon**
  - Factitious phenomenon
  - Abuse
  - Catastrophizing
  - Secondary gain
  - Psychiatric conditions including Depression and anxiety
  - Somatization
  - Pre-morbid functioning

- **Previous therapies/iatrogenic causes**
  - Multiple surgeries
  - Adhesions
  - Distorted anatomy
  - Nerve compression and injury
  - Other Chronic Pain conditions

- **Central pain syndromes like fibromyalgia**
Diseases causing Chronic Pelvic Pain

- Cyclic:
  - Primary dysmenorrhea
  - Endometriosis
  - Adenomyosis
  - Mittelschmertz
- Non-cyclic:
  - Pelvic masses
  - Adhesions
  - Infections
  - Non-gyn causes
  - Interstitial cystitis
- Related to intercourse:
  - Endometriosis
  - Vaginismus
  - Vaginal atrophy
  - Musculoskeletal
  - Any non-cyclic cause could be exacerbated.

Risk Factors of Non-Cyclical Chronic Pelvic Pain

- Drug or alcohol abuse
- Miscarriage
- Depression
- Heavy menstrual flow
- Pelvic inflammatory disease
- Previous cesarean delivery
- Pelvic pathology
- Abuse
- Psychological comorbidity
Risk Factors for Dyspareunia

- Menopause
- Pelvic inflammatory disease
- Sexual abuse
- Anxiety
- Depression

Psychosocial issues in CPP

- Increased levels of depression: Depression 2.5 times more likely if CPP present with pelvic pathology.
- Work inhibition
- Dissatisfaction
- Sadness
- High somatization
- Increased physical and sexual abuse (31% to 64%).
- Increased disturbances in sexuality and in relationships.
Depression, Anxiety, Abuse

- Negative pathology on Laparoscopy associated with greater depression scores.
  - Magni G et al 1984
- Higher somatisation scores in idiopathic pelvic pain.
  - Magni G et al 1986
- Higher rates of hysteria, depression, somatization and anxiety.
  - Agarwal P et al 1996

Sexual Abuse

- 36 CPP, 23 CLP and 20 pain free controls.
- CPP and CLP similar in abuse rates.
- CPP abused more often before 15 YO.
- CPP and CLP: More physical and sexual abuse, emotional neglect than controls.
  - Lampe A et al, 2000
70% of women with CPP experience sexual dysfunction such as

Dyspareunia,
Loss of interest
Postcoital pain.

Sexual Problems in CPP

- Prospective case matched (n=154 +58).
- Sexual avoidance
- Nonsensuality
- Vaginistic complaints
- Sexual dissatisfaction.
- Depression, anxiety and sexual abuse associated with above.
- Sexual abuse predictor of sexual problems in both cases and controls.

  - Ter Kuile MM et al 2010
Quality of Life: Predictors

- N=57.
- Endometriosis Vs No endometriosis (Lap)
- Quality of life correlated to degree of pain irrespective of presence of Lap findings. Souza et al.


CPP Management
Diagnostics

- Pregnancy test
- ? Is there an IUD?
- MRI
  - If pain worse at night, neurologic symptoms, no progress despite aggressive therapy
  - If pain follows a dermatomal pattern
  - If pain post urogynecologic procedure to evaluate for permanent sutures
  - Bone scan if post major pelvic surgery to evaluate for osteitis pubis

CPP Management

- Determine the reason for the pain.
- We are unlikely to appropriately treat an undiagnosed condition.
- Order imaging and investigations as necessary.
- Refer to a gynaecologist for surgical management if indicated.
- If surgery not indicated or if it fails, then better managed conservatively.
Management

- Therapy for CPP
- Physical therapy
- Psychological evaluation and support, stress management
- Maximizing co-morbid pathology
- Depression, low back pain, obesity, diarrhea, constipation
- Medications
- Hormones
- Muscle relaxants and other agents
- Adjunctive medications
- Analgesics
- Disease specific medications
- Injection therapy
- Surgery

Medications

- Benzodiazepine with rectal massage: Some evidence of response in pelvic floor disease.
- Peripheral neuralgias: Antiepileptics like gabapentin, pre-gabalin.
- Tricyclics: Amitriptiline, nortriptiline, desipramine.
- SNRI: Duloxetine, Venlafaxine.
Exercises

- **Myofascial pressure**  
  Travell and Simons 2003

- **Kegel exercises**
  - Improved pelvic pain in incontinent patients.  
  Petros and Skilling 2004

- **Thiele Exercises: Improved Irritative bladder symptoms in IC and high tone pelvic floor dysfunction.**
  - Oyama et al, Urology 2004

Psychological therapies

- **Cognitive Behavioral model**
  - Muscular relaxation,
  - Meditation
  - Stress management techniques
  - Recognizing and modifying catastrophic cognitions
  - Feelings of helplessness
  - Lifestyle modification
  - Effective communication with family, friends, and health care providers.
  
  Peters AA, 1991
Biofeedback

- Proctalgia Fugax > Proctalgia
- Levator Ani syndrome. (Electrogalvanic Stimulation when BFB n/a)
- Chronic Rectal Pain.

N= 170; Proctalgia Fugax and Proctalgia.
- Biofeedback
- Botox,
- TCAs
  - Sacral nerve stimulation Biofeedback (29/17) > TCAs (26/10).

- Botox (9/5), Sacral nerve stimulation (3/2).
- Treatment effect: Biofeedback: Defecatory dysfunction.

- Atkin GK, Dis Col Rectum 2011
Systematic review of multiple CPP syndromes:

Biofeedback was more effective than electrogalvanic stimulation and massage. 85% Response to BFB in Chronic Proctalgia when tenderness to traction of Levator Ani present.

Chiarioni and Whitehead 2011

Levator Ani Syndrome
Therapy for Sexual Abuse

- Individual, group, family, and somatic therapies - Focus on crisis resolution and symptom reduction.

- *Women’s Safety in Recovery: Therapist led,*
  - Emphasis: effects of childhood sexual trauma
  - Problem-solving and skill-building exercises

Interdisciplinary Management

- N=47
- Cognitive behavioral therapy
- Improved sexual function: lubrication, satisfaction and comfort with frequency.
  - Breton et al 2008.
Multidisciplinary Pain Management

- Improved anxiety and depression.
- Improved psychosocial functioning.
- Improved return to work.
- Increased social activities.
- Improved sexual activity.
- Reduced pain severity.
- Improved global somatic symptom scores.

Thomsen AB 2001
Peters SS, 1991

- It takes a team to manage Chronic Pelvic Pain.
- If there are treatable surgical or infectious causes, treat them first.
- Donot ignore the psychosocial issues involved.
- Narcotics beyond modest doses may not help.