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Saturday, June 10, 2017 (Room 11)

16:30 - 17:25 WS #163: Strife with Prostates and Urologic Pain

17:35 - 18:30 WS #175: Strife with Prostates and Urologic Pain (Repeated)

Painful bladder syndrome

Andrew Lienert

OneSixOne urology

CMDHB

Overview

- Diagnosis: Interstitial Cystitis [IC] vs Painful bladder syndrome [PBS]
- Diagnosis
- Medical management
- Surgical management

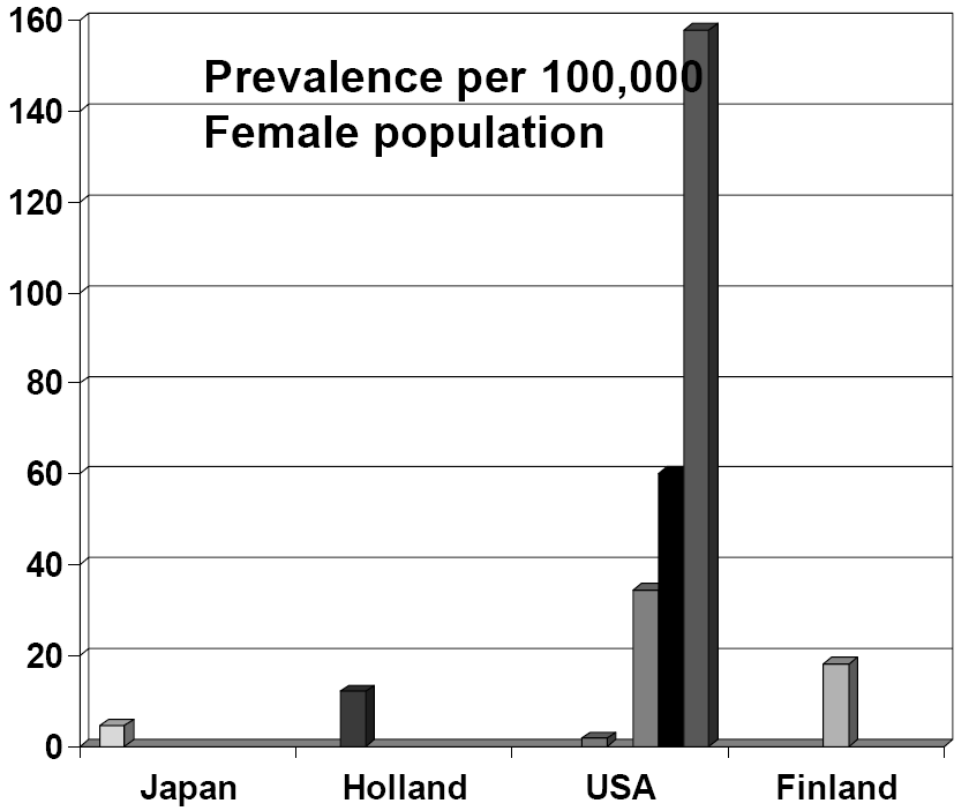
Painful bladder syndrome

➔ the complaint of suprapubic pain related to bladder filling, accompanied by other symptoms such as increased daytime and night-time frequency, in the absence of proven urinary infection or other obvious pathology

Interstitial cystitis : subset of PBS

➔ a specific diagnosis and requires confirmation by typical cystoscopic and histologic features “Without specific definition of bladder lesion”

Prevalence varies by definition



Diagnosis: History

Symptoms

Pelvic pain : essential

Typical suprapubic pressure sensation
Pain in lower abdomen, low back, inguinal area, vagina, urethra, scrotum or testes, multiple locations
Pain with/after intercourse in vagina, penile shaft can last for days.
Dysuria
Over 50% with constant pain – severity is highly variable
Pain characterized as spasms, worse in upright position, worse with emotional stress

"I've reached that age where I've given up on Mind Over Matter and am concentrating on Mind Over Bladder."

Symptoms

Frequency / Urgency

- ➔ Frequency : May be presenting Symptom
- ➔ Urgency : Confused with OAB Sx
- ➔ often develops gradually – not noticed immediately
- ➔ 8~60 voids/day
- ➔ nocturia - variable

Symptoms

Problems

the diagnosis of PBS/IC is clinical and based on symptomatology

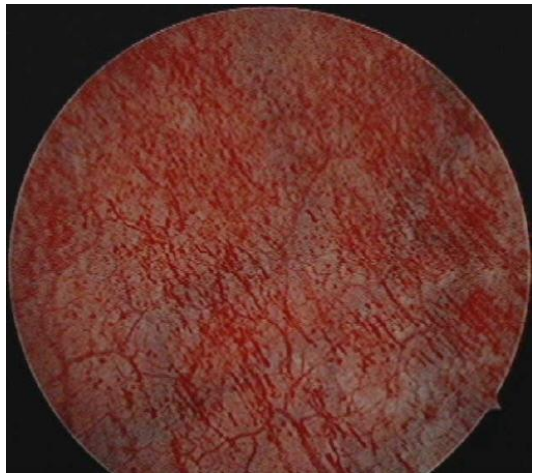
PBS/IC is a diagnosis of exclusion.

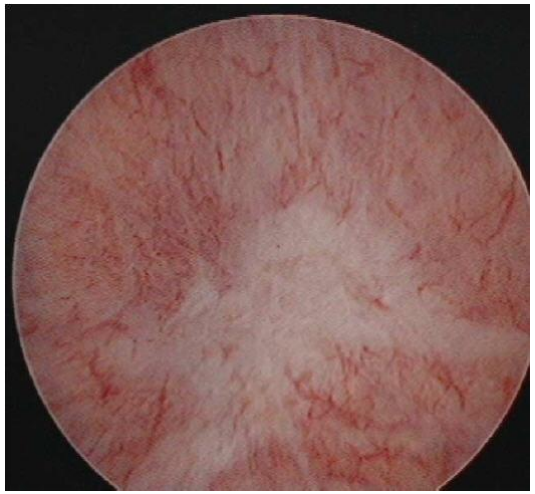
there is no evidence to qualify or quantify the symptoms to include or exclude patients from the diagnosis of PBS/IC.

Differential diagnosis

Urological disorders	
Overacitive bladder	**Bacterial cystitis**
Chronic abacterial prostatitis (CPPS)	**CIS bladder/Carcinoma**
Urethritis	**Urethral diverticulum (symptomatic)**
Urethral or bladder calculus	**Radiation cystitis**
Gynocological disorders	
Endometriosis	**Pelvic inflammatory disease**
Vulvadynia	**Vulvar vestibultitis**
Vaginitis	**Urogenital atrophy**
Active herpes infection	**Pelvic malignancy/Large fibroid**
Major pelvic prolapse	
Gastrointestinal disorders	
Irritable bowel syndrome	**Inflammatory bowel disease**
GI pelvic malignancy	**Colovesical fistula**
Diverticular disease	**Hernia**

Cystoscopy





- Pain on filling
- Biopsy [inflammation, granulation tissue, mast cells, fibrosis]
- Ulcers [not true ulcer but fissure in mucosa due to filling]

Associated complaints

Mental Health: Depression and Panic disorders are more common : J Urol 2008, 180 1378

Depression more difficult to treat in these patients

Mental health, pain and urinary symptoms are correlated.

When should you suspect interstitial cystitis / PBS?

Pain, Frequency/Nocturia and Urgency

AND

Physical exam excludes Vaginitis, Urethral
or Vulvar lesion or Infection

AND

UA is negative for Hematuria

AND

Urine culture during symptoms is Negative

AND

No Hx of Neurological problem, Pelvic trauma,
Malignancy or recent Pelvic Surgery

Management

Stepwise treatment
Start with basics and build up

1. Conservative and / or physical therapy
2. Pharmacological
3. Bladder hydrodistension
4. Sacral neuromodulator
5. Botox injections
6. surgery

Clinical Guidelines

- 1st line treatments: conservative
  - Patient education about IC and treatment options
  - Behavioral modifications (B)
    - Timed voiding
    - Controlled fluid intake
    - Stress reduction
    - Avoidance of triggers
    - Dietary changes: avoid acidic foods, coffee, tea, soda, spicy foods, artificial sweetener, and alcohol
      - 4 C's: carbonated, caffeine, citrus, high concentration of vitamin C

(American Urological Association, 2011; The Japanese Urological Association, 2009; http://www.mayoclinic.com/health/interstitial-cystitis/DS00497)

Clinical Guidelines

- 2nd line treatments
  - Physical Therapy (C)
    - Biofeedback
    - Soft tissue mobilization
    - Stretching
    - Pelvic floor muscle training?
      - AUA says avoid
      - JUA says nothing
      - Research mixed

50-70% moderate or marked reduction in symptoms

(American Urological Association, 2011; The Japanese Urological Association, 2009; Weiss, 2001)

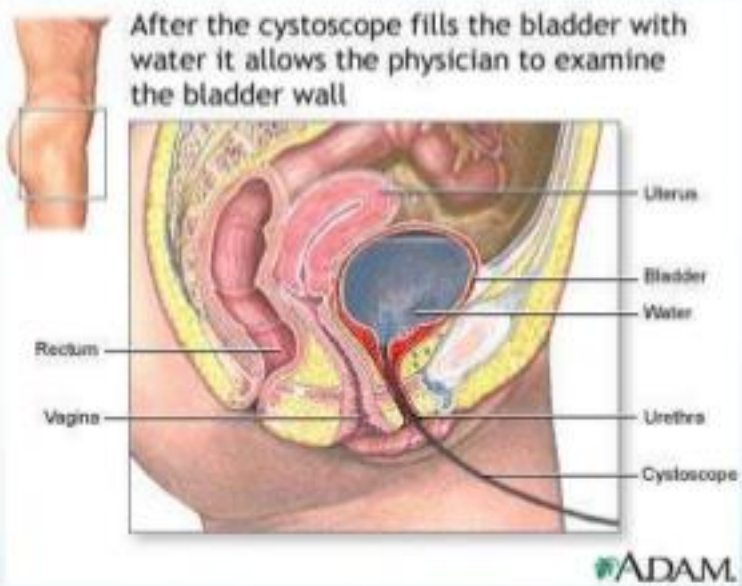
Clinical Guidelines

- 2nd line treatments
  - Pharmacology for pain management
    - Amitriptyline (B), Cimetidine (C), Hydroxyzine (C) : inhibit histamine receptors to decrease pain signal transmission
    - Pentosan polysulfate (B): repairs damaged GAG layer of bladder mucosa
      - Takes 3-6 months to see effects and only effective in approximately 25% of patients
  - Intravesical treatments
    - Dimethyl sulfoxide (B): anti-inflammatory, analgesic, and muscle relaxant
    - Heparin (C): functions as GAG layer for bladder
    - Lidocaine (C): analgesic

(American Urological Association, 2011; The Japanese Urological Association, 2009)

Clinical Guidelines

- 3rd line treatment: cystoscopy with short duration, low pressure hydrodistension (B)
  - Most common treatment, 50% efficacy, effects last about 6 months
  - Inflate bladder with saline to 80cmH_2O or 800-1000mL, maintain pressure for a few minutes then drain bladder

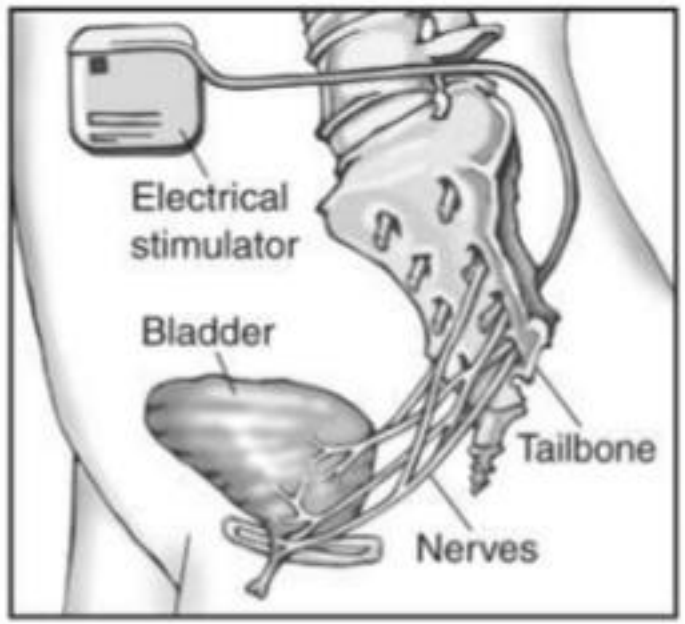


(http://www.umm.edu/graphics/images/en/1089.jpg)

(American Urological Association, 2011; The Japanese Urological Association, 2009)

Clinical Guidelines

- 4th line treatment: neurostimulation (C)
  - Bilateral S3 nerve stimulators
    - Significant decrease in frequency and nocturia
    - Significant improvement in Urinary Distress Inventory short form scores, showing patient satisfaction
    - Decrease in episodes of fecal incontinence
  - TENS for pain relief
    - External low back or supra-pubic placement
    - Internal placement of device in vagina



(http://www.kidney.niddk.nih.gov/kudiseases/pubs/interstitialcystitis_ez/images/nerve_stimulation.jpg)

(American Urological Association, 2011; The Japanese Urological Association, 2009; Steinberg et al., 2007, http://www.mayoclinic.com/health/interstitial-cystitis/DS00497)

Clinical Guidelines

- 5th line treatments
  - Cyclosporine A (C)
    - Anti-inflammatory and immunosuppressive
    - More effective for patients with Hunner's lesions
      - 85% vs. 30% effective
  - Intradetrusor botox injection (C)
    - Risk of requiring intermittent catheterization after treatment
    - Up to 4 injections, separated by 6 months effective for symptom and pain relief as well as increasing bladder capacity
    - Not as effective for patients with Hunner's lesions

(American Urological Association, 2011; The Japanese Urological Association, 2009; Forrest et al., 2012; Kuo HC, 2013)

Clinical Guidelines

- 6th line treatment: surgery (C)
  - Cystoplasty
    - Part/all of bladder removed and replaced by section of bowel to function as new bladder
    - Uncommon
  - Urinary diversion with/without cystectomy
    - Section of bowel becomes conduit for ureters, stoma created in abdomen, allows urine to drain continually into external collection bag
    - Section of bowel becomes conduit for ureters, drains into another section of bowel that has become internal pouch that must be emptied through intermittent self-catheterization
  - Rarely performed because many patients will still experience some symptoms, mainly pain, after surgery

(http://www.ichelp.org/page.aspx?pid=384 Revised June 03, 2011)

PBS
Summary

- Debilitating common remitting disease
- Unknown aetiology
- Impairs quality of life
- Treatment options: ‘trial and error’
- Significant economic burden to patient and health system

SCROTAL PAIN

ANDREW LIENERT

ONE SIX ONE UROLOGY

CMDHB

AIMS

- REVIEW POTENTIAL CAUSES OF SCROTAL PAIN
- OVERVIEW OF DIAGNOSIS
  - HISTORY
  - EXAMINATION
  - IMAGING
- MANAGEMENT OF MORE COMMON CAUSES

POTENTIAL CAUSES

ACUTE

- TORSION
- INFECTION
- TUMOUR
- TRAUMA
- VIRAL

SUBACUTE / CHRONIC

- NON-SPECIFIC / CHRONIC
- POST-VASECTOMY
- HYDROCOELE
- EPIDIDYMAL CYST
- VARICOCOELE

TORSION

- SUDDEN ONSET TESTICULAR PAIN BUT CAN RADIATE TO ABDOMEN
  - 30MINS FROM NIL TO SEVERE
- NAUSEA +/- VOMITING COMMON
- YOUNGER PTS: <20
- EXAMINATION:
  - SWOLLEN, ENGORGED TESTIS
  - HIGH RIDING / TRANVERSE LIE
  - LACK OF CREMASTERIC REFLEX
    - LOW PPV 35%, HIGH NPV 90-95%
- MANAGEMENT: URGENT REFERAL

DIAGNOSIS OF OTHER CAUSES

- HISTORY
  - DURATION SYMPTOMS
  - SEVERITY SYMPTOMS
  - SCROTAL MASS?
  - TRAUMA
  - PREVIOUS SURGERY; VASECTOMY
  - ASSOCIATED SYMPTOMS
    - FEVER
    - URETHRAL DISCHARGE / SEXUAL HISTORY
    - ABDOMINAL PAIN

DIAGNOSIS OF OTHER CAUSES

- EXAMINATION
  - SCROTAL SWELLING
    - TRANSILLUMINATION
  - TESTICULAR SWELLING VS EPIDIDYMAL SWELLING
  - SITE OF TENDERNESS
  - URETHRAL DISCHARGE
  - SKIN ERYTHEMA

DIAGNOSIS OF OTHER CAUSES

- EXAMINATION
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  - SITE OF TENDERNESS
  - URETHRAL DISCHARGE
  - SKIN ERYTHEMA

- INVESTIGATION: USS SCROTUM
  - URETHRAL SWAB / MSU / URINARY PCR IF CONCERNED ABOUT INFECTION

MANAGEMENT

- EPIDIDYMAL CYST / HYDROCOELE
  - ASSYMPTOMATIC DOES NOT NEED MANAGEMENT
  - PAIN / DISCOMFORT OR AWKWARD BECAUSE OF BULK: SURGICAL EXCISION
- INFECTION
  - DON'T WAIT FOR SWAB RESULT OR URINE RESULT
  - SUSPECT STI: <35YRS; CEFTRIAXONE 500MG IM STAT + DOXYCYCLINE 100MG BD 14 DAYS
    - AZITHROMYCIN 1G PO SINGLE DOSE
    - CONTACT CHASING / TREATMENT
  - SUSPECT UTI:>35YRS, HOMOSEXUAL MALE
    - CIPROFLOXACIN 500MG BD FOR 10 DAYS

MANAGEMENT

- TUMOUR
  - URGENT REFERRAL TO UROLOGY OPD
  - ALMOST ALL ARE CURABLE

- TRAUMA
  - EXPLORATION VS CONSERVATIVE
    - INCREASE SALVAGE RATE IF OPERATE ON RUPTURED TESTIS
  - DISCUSS WITH UROLOGY

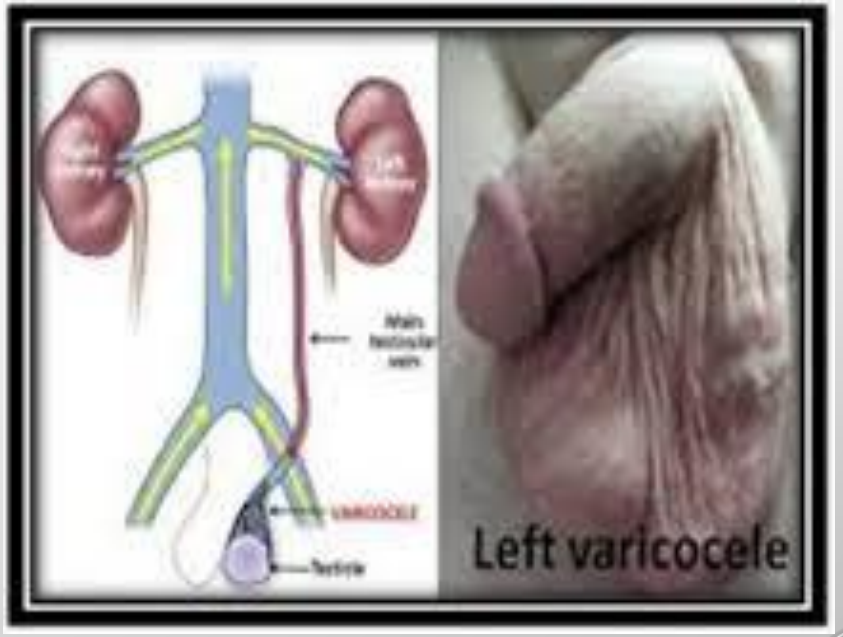
POST-VASECTOMY PAIN

- UP TO 15% PTS; ONLY 2-3% SEEK TREATMENT
- CAUSES
  - OBSTRUCTION WITH EPIDIDYMAL ENGORGEMENT
  - SPERM GRANULOMA
- TREATMENT
  - VASECTOMY REVERSAL: 70-80% SUCCESS
    - BUT FERTILE AGAIN!
  - EPIDIDYMECTOMY: 50-60% SUCCESS
  - EXCISE GRANULOMA: 90% SUCCESS

Carl decides to get a vasectomy

VARICOCOELE

- DILATED VEIN IN PAMPINIFORM PLEXUS
- CLINICAL: CAN SEE DILATED VEINS THROUGH SCROTAL SKIN
  - AT REST
  - STANDING / VALSALVA
- SUBCLINICAL: USS SHOWS DILATED VEINS
- VARICOCOELE REPAIR:
  - LAPAROSCOPIC, INGUINAL, SUBINGUINAL, EMBOLISATION
  - >80% PAINFREE IF CLINICAL
  - <50% IF SUBCLINICAL



CHRONIC SCROTAL PAIN

- PREVALENCE: VARIABLE DEPENDING ON DEFINITION
  - 0.1% - 5%
- EXCLUDE OTHER CAUSES
- ANALGESIA / NEUROMODULATORS
- ?EPIDIDYMECTOMY
  - ONLY IF TENDERNESS LOCALISED TO EPIDIDYMIS
    - 10-60% SUCCESS
- ORCHIDECTOMY
  - 10-50% SUCCESS
  - CAN DEVELOP PAIN ON CONTRALATERAL SIDE
- MICROSURGICAL DENERVATION SPERMATIC CORD
  - SMALL STUDIES SHOW PROMISING RESULTS
    - TRIAL LOCAL ANAESTHETIC INJECTION FIRST

QUESTIONS??

ACUTE RENAL COLIC

CT KUB, REFER IF STONE PRESENT

GP REFERRAL DIRECT FOR CT AT MERCY RADIOLOGY, AUCKLAND