AUA 2026 Washington, DC MAY 15-18

031IC - Male Chronic Pelvic Pain and Scrotal Pain: Common Clinical Scenarios, AUA Guidelines Review and Case-Based Discussion

Saturday, May 16

Faculty

Ryan P. Smith, MD

Sarah C. Krzastek, MD

Luriel I. Smith Harrison, MD

Parviz Kavoussi, MD

Cain Dimon, MD

Henry Lai, MD

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Course Title: 031IC - Male Chronic Pelvic Pain and Scrotal Pain: Common Clinical Scenarios, AUA Guidelines Review and Case-Based Discussion

Course Date: Saturday May 16, 2026

Course Time: 1:30-3:30 pm

Faculty:

1. Henry Lai, MD (Role: Course Director)
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6. Cain Dimon, M.D. (Role: Faculty Member)
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Course Category

Sexual Function/Infertility

Audience

- Urologists
- Residents
- Fellows
- Advanced Practice Providers (APP)

- Interprofessional (example: physicians and APP)

Physician Attributes

- Patient-centered care
- Medical knowledge
- Practice-based learning and improvement: applied in an individual physician's own practice
- Employ evidence-based practice
- Apply quality improvement: e.g. identify errors and hazards in care

Course Description

This course will focus on the current medical, surgical, pain management and multi-modal approaches to the treatment of male scrotal content pain. This includes a review of the 2025 AUA Guidelines for the management of chronic male pelvic pain. Surgical discussion (both microsurgical and robotic) will include the latest updates on microscopic denervation of the spermatic cord, cremasteric release, vasectomy reversal, epididymectomy, and varicocele repair. We will present the basic approach and the current anatomical and pathological understanding of the disease process, as well as the most recent surgical developments in the management of this common disorder. The role of appropriate preoperative counseling, imaging, and evaluation, including the role of spermatic cord injection, will similarly be reviewed. The course will provide evidence-based guidance and expert opinion on the preoperative counseling and preparation, surgical technique, and postoperative considerations for surgical treatments of chronic orchialgia and male pelvic pain. Practical tips on technique and intraoperative decision making will also be discussed. As conservative therapy is generally the mainstay of treatment, medical, physical therapy and pain management options will be comprehensively reviewed as well as alternative and novel therapies to broaden the provider's options when encountering these patients. There will be a focus on case management with time allotted for questions and discussion.

Course Format

The course format will include minimal didactic lectures and will preferentially utilize interactive, case-based discussions, and a question/answer session for participants. The panel of specialists will include urologists as well as a pain management physician for a broadened perspective in management of this disease. Video will also be utilized to highlight surgical technique.

Learning Objectives:

- Describe the key tenets of the evaluation of a male presenting with chronic scrotal content pain
- Understand the 2025 AUA Guidelines for male pelvic pain and understand the diagnostic and Management tenets of the recommendations
- Recognize the pain management options to treat male pelvic pain and know when to refer
- Determine when operative intervention may be appropriate in men with chronic pelvic pain
- Recognize the necessity of effective preoperative counseling in men considering surgical intervention for orchialgia
- Discuss the newest techniques in microsurgical and robotic management of chronic orchialgia
- Discuss a current review of the medical literature on male pelvic pain

General Outline

Faculty and Course Introduction (Lai and Smith)

Review of AUA Guidelines on Scrotal Content Pain 2025 (Lai)

Case-Based Discussion of Chronic Male Scrotal Content Pain Scenarios (Krzastek, Kavoussi, Smith Smith-Harrison)

Pain Management Approaches to Chronic Male Pelvic Pain (Dimon)

Question & Answer-All Faculty

Recommended readings

1. Visser WR, Smith-Harrison L, Payne B, Smith RP, Krzastek SC. Surgical management of chronic scrotal pain: a review of the current literature. Minerva Urol Nephrol. 2022 Mar 11. doi: 10.23736/S2724-6051.21.04529-8. Epub ahead of print. PMID: 35274901.
2. Kavoussi, P., West, B., Machen, L. Preoperative predictors of failure of microsurgical cord denervation for men with chronic orchialgia. Urology 2020.
3. Marconi M, Palma C, Troncoso P, Dell Oro A, Diemer T, Weidner W. Microsurgical Spermatic Cord Denervation as a Treatment for Chronic Scrotal Content Pain: A Multicenter Open Label Trial. J Urol. 2015.
4. Larsen SM, Benson JS, Levine LA. Microdenervation of the spermatic cord for chronic scrotal content pain: single institution review analyzing success rate after prior attempts at surgical correction. J Urol. 2013.
5. Benson JS, Abern MR, Larsen S, Levine LA. Does a positive response to spermatic cord block predict response to microdenervation of the spermatic cord for chronic scrotal content pain? J Sex Med. 2013.
6. Kavoussi, PK and Costabile, R. Ochialgia and the chronic pelvic pain syndrome. World J Urol. 2013.
7. Parekattil SJ, Gudeloglu A, Brahmbhatt JV et al. Trifecta nerve complex—potential anatomic basis for microsurgical denervation of the spermatic cord for chronic orchialgia. J Urol 2013.
8. Shridharani A, Lockwood G, Sandlow J. Varicocelectomy in the treatment of testicular pain: a review. Curr Opin Urol 2012.
9. Horovitz D, Tjong V, Domes T, Lo K, Grober ED, Jarvi K.Vasectomy reversal provides long-term pain relief for men with the post-vasectomy pain syndrome. J Urol. 2012.
10. Parekattil SJ, Brahmbhatt JV. Robotic approaches for male infertility and chronic orchialgia microsurgery. Curr Opin Urol. 2011.

11. Strom KH, Levine LA. Microsurgical denervation of the spermatic cord for chronic orchialgia: long-term results from a single center. J Urol. 2008.

12. Costabile RA, Hahn M, McLeod DG Chronic orchialgia in the pain prone patient: the clinical perspective. J Urol 1991.

13. Kavoussi, P. Microsurgical subinguinal cremaster muscle release for chronic orchialgia secondary to hyperactive cremaster muscle reflex in adults. Andrologia. 2019.

14. Kavoussi, P. Validation of targeted microsurgical spermatic cord denervation: Comparison of outcomes to traditional complete microsurgical spermatic cord denervation. Asian Journal of Andrology 2019.

15. Kavoussi, P., Calixte N., Brahmbhatt, J., Parekattil, S. Robot-assisted microsurgery for chronic orchialgia. TAU 2017.

16. Smith-Harrison, R., Smith, RP. Vasectomy reversal for post-vasectomy pain syndrome. TAU 2017.

17. Cohen, D. The Role of Pelvic Floor Muscles in Male Sexual Dysfunction and Pelvic Pain. Sex Med Rev. 2016.

18. Sun, Y., Liu T. Efficacy of Acupuncture for Chronic Prostatitis/Chronic Pelvic Pain Syndrome: A Randomized Trial. Ann Intern Med. 2021.

19. Lai HH, Pontari MA, Argoff CE, Bresler L, Breyer BN, Chou R, Clemens JQ, De EJB, Doiron RC, Johnson D, Kirkby E, MacDonald SM, Osborne JH, Parekattil SJ, Shelly B. Male Chronic Pelvic Pain: AUA Guideline: Part I Evaluation and Management Approach. J Urol. 2025 Aug;214(2):116-126. doi: 10.1097/JU.0000000000004564. Epub 2025 Apr 17. PMID: 40243110.

20. Lai HH, Pontari MA, Argoff CE, Bresler L, Breyer BN, Chou R, Clemens JQ, De EJB, Doiron RC, Johnson D, Kirkby E, MacDonald SM, Osborne JH, Parekattil SJ, Shelly B. Male Chronic Pelvic Pain: AUA Guideline: Part II Treatment of Chronic Prostatitis/Chronic Pelvic Pain Syndrome. J Urol. 2025 Aug;214(2):127-137. doi: 10.1097/JU.0000000000004565. Epub 2025 Apr 17. PMID: 40243102.

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Male Chronic Pelvic Pain and Scrotal Pain: Common Clinical Scenarios, AUA Guidelines Review and Case-Based Discussion

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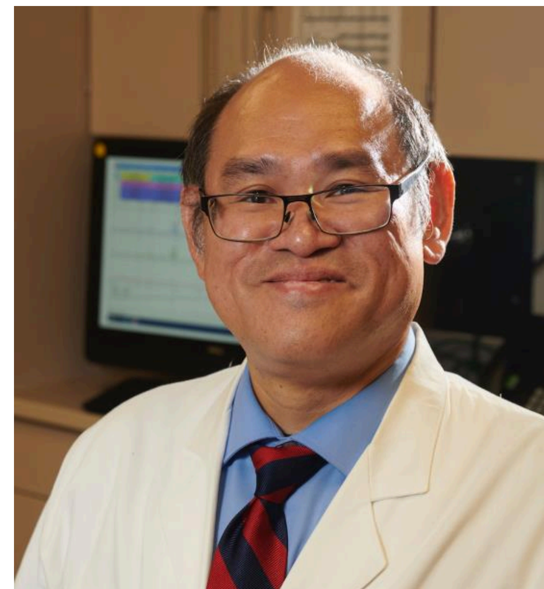

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No Relevant Disclosure

OUTLINE OF THE COURSE

- 2025 AUA Guideline on the Diagnosis & Management of Male CPP
- Four Cases
  - Post-Vasectomy Pain Syndrome
  - Varicocele-related Pain
  - Idiopathic Orchialgia and Pelvic Pain
  - Scrotal Content Pain

AUA Guideline on Diagnosis & Treatment of Male Chronic Pelvic Pain

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AUA 2026 Washington, DC MAY 15-18

New AUA Guideline on Diagnosis & Treatment of Male Chronic Pelvic Pain

- Journal of Urology (2025) articles:
  - Part I: Evaluation of male chronic pelvic pain
  - Part II: Treatment of CP/CPPS (chronic prostatitis/ chronic pelvic pain syndrome)
  - Part III: Treatment of CSCP (chronic scrotal content pain)

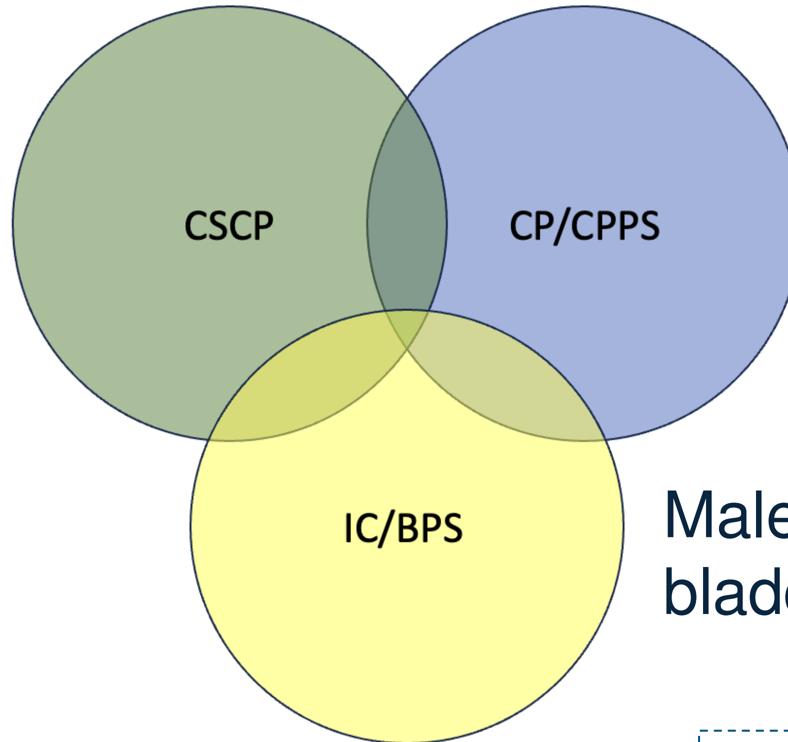
Male Chronic Pelvic Pain: AUA Guideline: Part III Treatment of Chronic Scrotal Content Pain

H. Henry Lai,[1] Michel A. Pontari,[2] Charles E. Argoff,[3] Larissa Bresler,[4,5] Benjamin N. Breyer,[6] Roger Chou,[7] J. Quentin Clemens,[8] Elise J.B. De,[9] R. Christopher Doiron,[10] Dane Johnson,[1] Erin Kirkby,[11] Susan M. MacDonald,[12] Jill H. Osborne,[13] Sijo J. Parekattil,[14] and Beth Shelly[15]

THE JOURNAL of UROLOGY

SCOPE OF THE NEW AUA GUIDELINE

Chronic scrotal content pain



Chronic prostatitis/ chronic pelvic pain syndrome

Male interstitial cystitis/ bladder pain syndrome

± Pelvic floor myalgia

Conditions may overlap. They are not mutually exclusive.
e.g., some men may have features of both CP/CPPS and IC/BPS.

1. **Symptoms of Male Chronic Pelvic Pain**
(CSCP? CP/CPPS? IC/BPS? Pelvic floor?)

↓

2. **Rule out Confusable Diseases**
(Neurologic, musculoskeletal, orthopedic, other GU causes, infection, STD, etc)

↓

3. **Basic Evaluation of Chronic Pelvic Pain**
(History, Physical: Scrotal & Pelvic floor exam, UA, UCx, PVR, Questionnaire)

****You cannot skip the critical step to rule out other pathology since there are Diagnoses of exclusion.**

GUIDELINE STATEMENT 1

In the initial evaluation of patients with chronic pelvic pain, clinicians should include a **comprehensive history**, complete **review of symptoms**, **physical examination**, and **laboratory studies** to document symptoms and signs of chronic pelvic pain. Clinicians should screen for concurrent pelvic pathology and exclude other confusable disorders that could be the cause of patient symptoms as part of the initial assessment for pelvic pain. ***(Clinical Principle)***

Diagnosis of Male Chronic Pelvic Pain Conditions:
- History, including complete review of systems
- Physical examination, including pelvic exam
- Questionnaires (pain, urinary, quality of life)
- Urinalysis, mid-stream urine culture, PVR
- Rule out confusable conditions (see Tables 4 & 5)

*Some patients may have more than one feature. They are not mutually exclusive (e.g., pelvic floor myalgia is prevalent among men with CP/CPPS or IC/BPS [see dotted line], and may be treated accordingly).

CP/CPPS Features:
- Perineal pain
- Bilateral scrotal pain
- Penile pain, dysuria
- Ejaculatory pain

Male IC/BPS Features:
- Bladder pain, pressure, discomfort
- Painful bladder filling
- Painful urge to urinate
- Daytime/nighttime frequency

CSCP Features:
- Unilateral scrotal pain
- Absence of other pelvic sites of pain or urinary symptoms

Pelvic Floor Myalgia
- Tender PFM on exam (see Figure 2)

CP/CPPS Treatment:
- See Part II

Male IC/BPS Treatment:
- See AUA IC/BPS Guideline

CSCP Treatment:
- See Part III

PFM Treatment:
- PFPT, EMG

CP/CPPS: chronic prostatitis/ chronic pelvic pain syndrome; CSCP: chronic scrotal content pain; EMG: electromyography; IC/BPS: interstitial cystitis/ bladder pain syndrome; PFM: pelvic floor muscles; PFPT: pelvic floor physical therapy; PVR: post-void residual

HISTORY TAKING

Onset, duration, severity

Location:

- Suprapubic/ bladder area? (IC/BPS)
- Associated significant daytime & nighttime frequency? (IC/BPS)
- Perineal pain, penile pain? (CP/CPPS)
- Bilateral vs. unilateral scrotal pain? (CP/CPPS typically bilateral)
- Widespread pain? (e.g., fibromyalgia, IBS) (IC/BPS, CP/CPPS)

HISTORY TAKING

Onset, duration, severity, location

Aggravating & Relieving factors:

- Pain worse with bladder filling, improve with emptying? (IC/BPS)
- Dysuria, ejaculatory pain? (CP/CPPS)
- Pain worse with sitting, driving, heavy lifting, exercises, or upright?
- Pain improves with supine position?
- Pain worse with sexual activities?

HISTORY TAKING

Onset, duration, severity, location, aggravating & relieving factors

Character:

Neuropathic quality? Radiating pattern?

- Pain radiating up inguinal canal?
- Pain radiating from a spinal nerve root dermatome (radiculopathy)?
- Peripheral nerve dermatome (Ilioinguinal, genitofemoral, pudendal)

History: s/p vasectomy, inguinal hernia repair, trauma, infection.

PHYSICAL EXAM — SCROTAL EXAM

GUIDELINE STATEMENT 6

Clinicians should perform a **thorough scrotal examination** in patients with chronic pelvic pain; a scrotal ultrasound may be performed. ***(Clinical Principle)***

(Scrotal ultrasound is optional, may be used when diagnosis is uncertain)

PHYSICAL EXAM — SCROTAL EXAM

Differential Diagnosis of Scrotal Pain	
Epididymitis	Varicocele
Orchitis	Referred pain (e.g., obstructing distal stone, entrapped nerve, neuropathic)
Sexually transmitted disease (STD)	Pelvic floor myalgia and/or tenderness
Epididymal cyst	Hydrocele
Spermatocele	Testicular mass
Sperm granuloma	Testicular torsion
Spermatic cord lesion/ tenderness	Testicular appendage torsion

PHYSICAL EXAM — PELVIC FLOOR EXAM

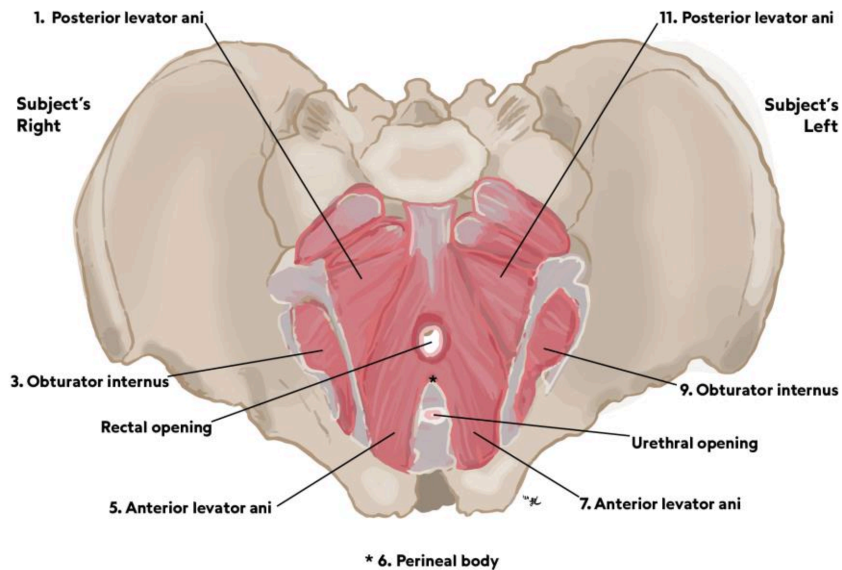
GUIDELINE STATEMENT 5

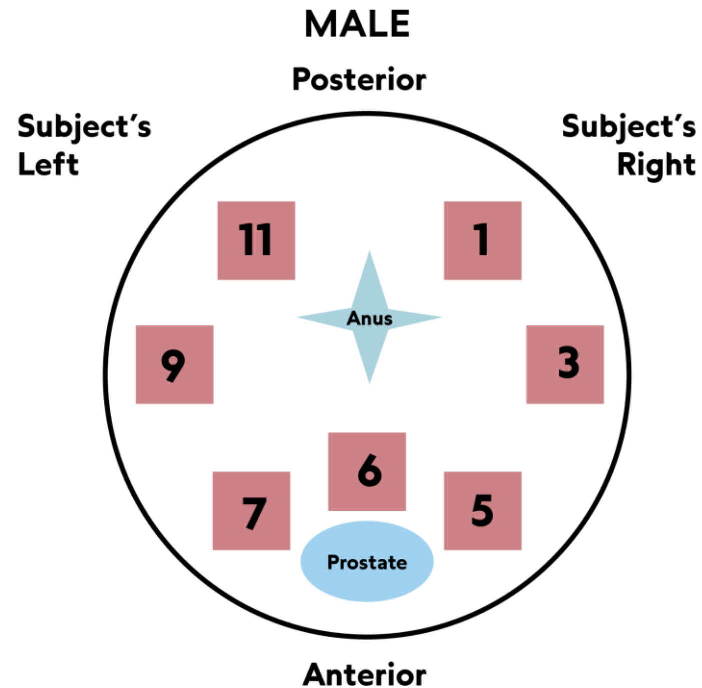
Clinicians should perform **digital palpation of the pelvic floor muscle transrectally in men** to identify tenderness suggesting a diagnosis of pelvic floor myalgia. ***(Expert Opinion)***

(Assess for pelvic floor myalgia)

PHYSICAL EXAM — PELVIC FLOOR EXAM

Transrectal exam of pelvic floor (DRE exam position, lying lateral w/ knee bent)





1, 11	Posterior levator ani muscle
3, 9	Obturator internus muscle (laterally)
5, 7	Anterior levator ani muscle
6	Perineal body (between anus and scrotum)

GUIDELINE STATEMENT 2

Clinicians may use **validated questionnaires** to assess pain levels, urinary symptoms, and quality of life. ***(Clinical Principle)***

COSI (CHRONIC ORCHIALGIA SYMPTOM INDEX)

Pain Symptoms

1. When you have testicle pain, do you also feel it in your groin (area above testicle)?
No _ (0) Yes _ (1)

2. Would you describe your testicle pain as burning?
No _ (0) Yes _ (1)

3. Does your testicular pain wake you up at night?
Never _(0), Sometimes _(1) Always _ (2)

4. In the past week how often did you feel pain in your testicle?
Never _(0), Occasionally _(1), Usually _(2), Always _(3)

5. What number best describes your MINIMUM (lowest) testicle pain in the past week?
0 _ None 1 _ Mild 2_ 3_ 4_ 5_ Worst pain imaginable

6. What number best describes your MAXIMUM (highest) testicle pain in the past week?
0 _ None 1 _ Mild 2_ 3_ 4_ 5_ Worst pain imaginable

Sexual Symptoms

7. In the past week how often have you had difficulty achieving or maintaining an erection?
Never (eg. you have normal erections) _ (0), Sometimes _(1), Always _(2)

8. In the past week, has your desire to have sex (libido) been lower than normal for you?
No _ (0), Yes _(1)

9. In the past week have sexual activities been painful?
No _ (0), Sometimes _(1), Always _(2)

Quality of Life

10. In the past week, how much has your testicular pain prevented you from working or doing your normal daytime activities?
0 _ None 1 _ A little 2_ Sometimes 3_ Often 4_ Usually 5_ Completely

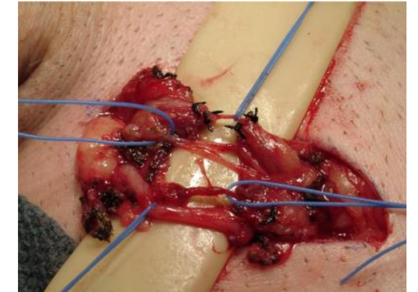
11. In the past week, how much has your testicular pain prevented you from doing leisure activities you enjoy?
0 _ None 1 _ A little 2_ Sometimes 3_ Often 4_ Usually 5_ Completely

12. If nothing changed and your symptoms remained this way for the rest of your life, how would you feel?
0 _ Delighted 1 _ Pleased 2_ Mostly Satisfied 3_ Mixed 4_ Unhappy 5_ Miserable

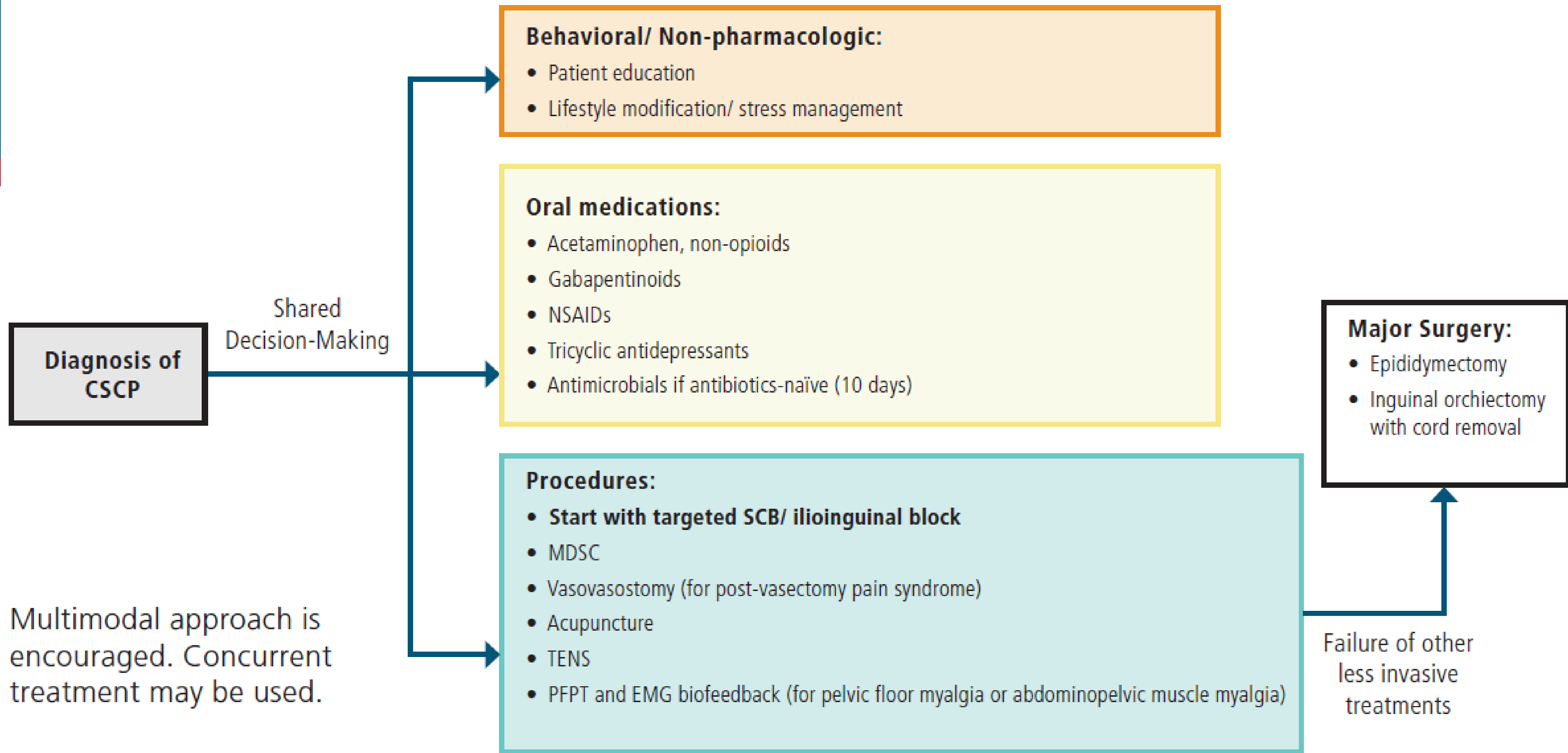
Score: Pain (Q 1-6) __ Sexual (Q 7-9) __ QOL (Q 10-12) __

TREATMENT DECISION

GUIDELINE STATEMENT 13



Treatment decisions should be made based on **shared decision-making** between the patient and clinician, with the patient informed of the risks, potential benefits, and treatment alternatives. Initial treatment should typically be nonsurgical. ***(Clinical Principle)***



CSCP: chronic scrotal content pain; EMG: electromyography; MDSC: microsurgical denervation of spermatic cord; NSAID: nonsteroidal anti-inflammatory drug; PFPT: pelvic floor physical therapy; SCB: spermatic cord block; TENS: transcutaneous electrical nerve stimulation

BEHAVIORAL/ NON-PHARMACOLOGIC TREATMENT

GUIDELINE STATEMENT 31

Clinicians should discuss **lifestyle modification** that may improve symptoms and implement as feasible. ***(Clinical Principle)***

BEHAVIORAL/ NON-PHARMACOLOGIC TREATMENT

Social support

- No specific evidence for CSCP. Generally used for chronic pain.
- Warm baths. Warm/cold packs.
- Scrotal support. Elevation. Rest.
- Reduction of stress.
- Address anxiety & catastrophizing.
- Mitigate fixation on, or hypervigilance about somatic symptoms.
- Support group or system.

EDUCATION FOR PROVIDERS (Guideline, AUA University, Urology Care Foundation)

THE JOURNAL of UROLOGY®

AUA University
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CHRONIC ORCHIALGIA: AN ALGORITHM FOR SUCCESSFUL TREATMENT

TODAY'S GUEST

David Shin, MD

American Urological Association

AUAU Podcast: Chronic Orchialgia - An Algorithm For Successful Treatment

Urology Care FOUNDATION™
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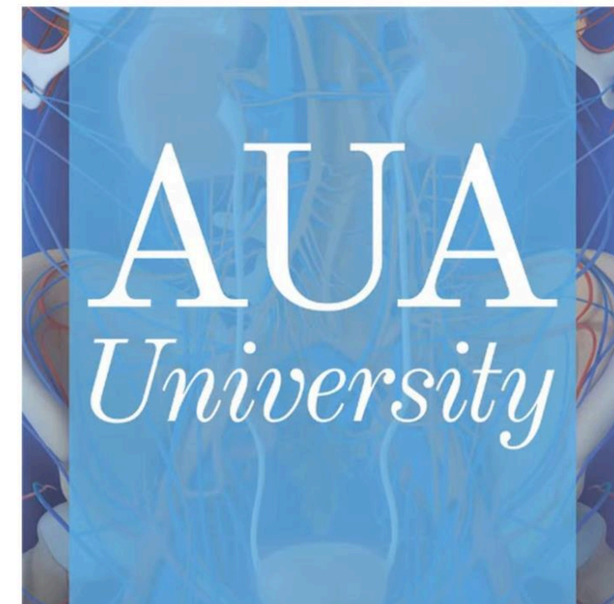
TESTICULAR PAIN 101

TODAY'S GUEST

Susanne Quallich, MSN, ANP-BC, NP-C, CUNP, FA

Testicular Pain 101 - Urology Care Podcast



AUA Guidelines: Diagnosis and Management of Male Chronic Pelvic Pain

PHARMACOLOGIC TREATMENT

GUIDELINE STATEMENT 32

In patients with CSCP, clinicians may prescribe pharmacologic pain management agents such as **acetaminophen**, **nonsteroidal anti-inflammatory** drugs, **tricyclic antidepressants**, **gabapentinoids**, and **non-opioid options** after counseling patients on the risks and benefits. **Multimodal therapy** to pain management is recommended. ***(Clinical Principle)***

PHARMACOLOGIC TREATMENT

- NSAIDs to start with
- Tricyclics (nortriptyline, amitriptyline): 50% improvement of pain. [1,2]
- Gabapentinoids (pregabalin, gabapentin): 80% improvement. [1]
- Treating testosterone deficiency may help some patients. [3]
- Non-opioids options.
- Multimodal treatment, multi-disciplinary pain management.

[1] Sinclair et al. 2007; [2] Olcucu et al. 2018; [3] Cui et al. 2018

DIAGNOSTIC SPERMATIC CORD BLOCK

GUIDELINE STATEMENT 12

In patients with isolated unilateral CSCP, clinicians may perform **diagnostic spermatic cord block** and/or ilioinguinal block. ***(Expert Opinion)***

DIAGNOSTIC SPERMATIC CORD BLOCK

- Even a brief response to spermatic cord block (SCB) carries significant prognostic implications for the likelihood of responding to denervation.
- Positive response (50% reduction in pain) to SCB, 78% positive predictive value for achieving complete or partial pain relief with denervation.[1]
- A negative response to SCB associated with 57% negative predictive value. May still be candidates for denervation, counseled for diminished success.

[1] Parekattil et al. 2020

SURGICAL TREATMENT — DENERVATION

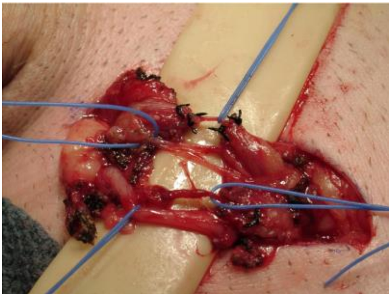
GUIDELINE STATEMENT 34

Clinicians may recommend **microsurgical denervation** of the spermatic cord to CSCP patients, especially if they previously responded to a spermatic cord block. ***(Conditional Recommendation; Evidence Level: Grade C)***

- Conventional microsurgical denervation of spermatic cord (MDSC)
- Targeted microsurgical denervation of spermatic cord (TMDSC)
- Robotic assisted MDSC

SURGICAL TREATMENT — DENERVATION

- Compared conventional MDSC to TMDSC [1]
- n=82 who failed conservative tx, but >50% improvement with SCB
- No difference in pain outcome MDSC vs. TMDSC
  - Complete pain resolution: 66.7% (MDSC), 69.8% (TMDSC)
  - Partial (>50% pain reduction): 17.9% (MDSC), 23.3% (TMDSC)
  - Change in pain 0-10 VAS: -5.9 (MDSC), -5.3 (TMDSC)
- Shorter OR time in TMDSC: 53 mins (MDSC), 21 mins (TMDSC)



[1] Kavoussi et al. 2019

SURGICAL TREATMENT — PVPS

GUIDELINE STATEMENT 35

Clinicians may offer **vasectomy reversal (vasovasostomy)** as a suitable treatment option for patients who have **post-vasectomy pain syndrome**. ***(Expert Opinion)***

(Options: VV, SCB, MDSC)

SURGICAL TREATMENT — EPIDIDYMECTOMY

GUIDELINE STATEMENT 39

Clinicians may offer **epididymectomy** to patients with pain and tenderness focal to the epididymis after failure of conservative therapies. ***(Expert Opinion)***

(Best for isolated epididymal pain without testicular pain, post-vas epididymal pain)

SURGICAL TREATMENT — ORCHIECTOMY

GUIDELINE STATEMENT 40

Clinicians may offer **inguinal (not scrotal) orchiectomy** with removal of the entire spermatic cord for patients with CSCP. ***(Expert Opinion)***

(Inguinal approach greater pain reduction. Scrotal approach has pain at cord stump)

AUA Guideline on Diagnosis & Treatment of Male Chronic Pelvic Pain

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HEALTH CARE

AUA 2026 MAY 15-18 Washington, DC

Male Chronic Pelvic and Scrotal Pain

Common Clinical Scenarios and Case-Based Discussion

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3. Department of Urology, University of Virginia

No Disclosures

Three Cases

- Varicocele-related Pain
- Idiopathic Orchialgia and Pelvic Pain
- Scrotal Content Pain

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Three Cases

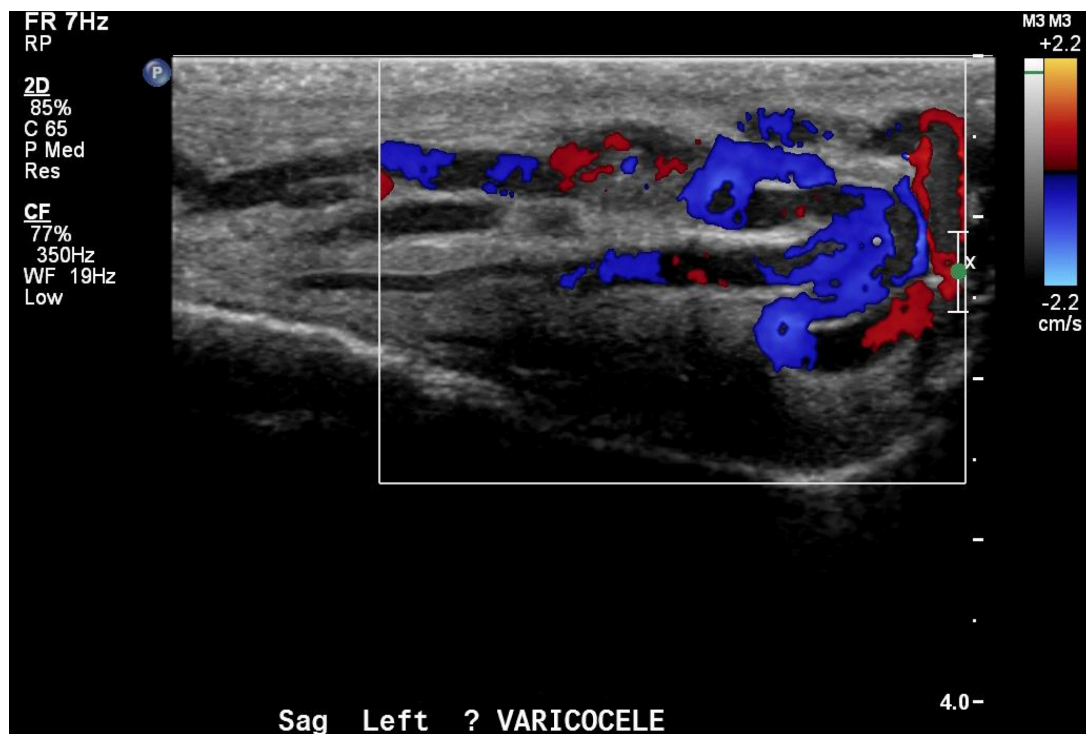
- Post-Vasectomy Pain Syndrome
- Varicocele-related Pain
- Idiopathic Orchialgia and Pelvic Pain
- Scrotal Content Pain

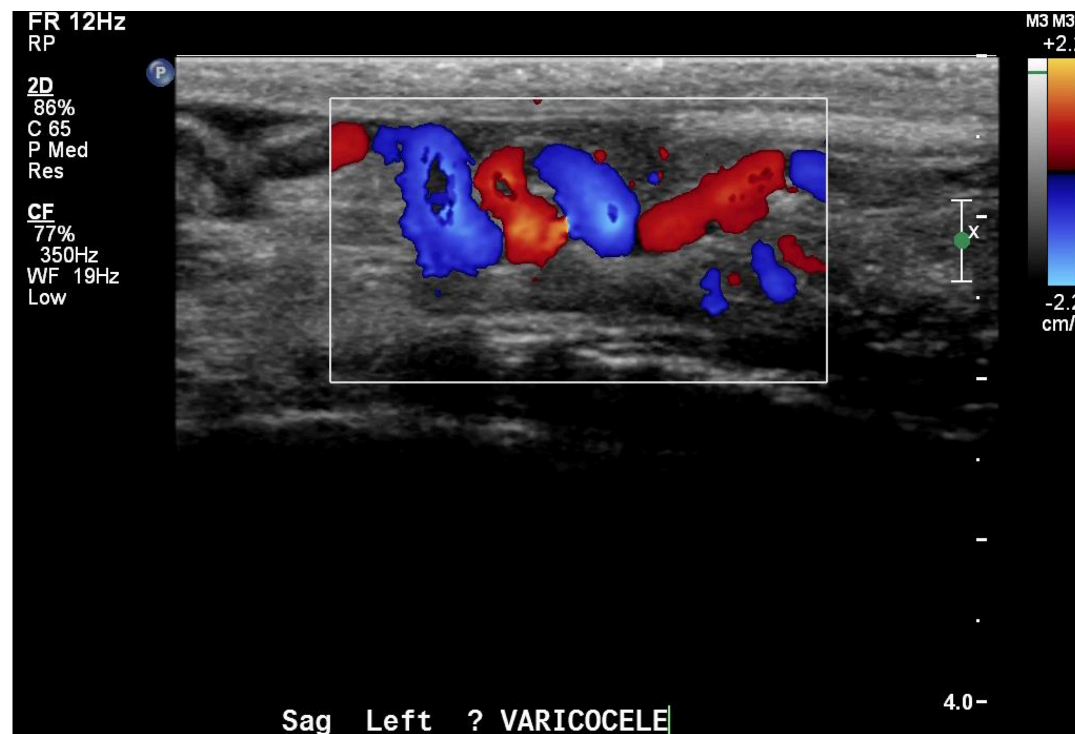
Varicocele-related Pain

- **27 yo M who presented to his PCP reporting dull aching left scrotal pain, worsened after working all day.**
- **PCP obtained a scrotal ultrasound and referred to your clinic**

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain





Varicocele-related Pain

- **What to ask?**
  - **Onset, location, duration, character, aggravating factors, relieving factors, timing, severity**
  - **History: trauma, surgery, infection**

Varicocele-related Pain

- **HPI: Pain started 3 months ago, L > R, worse after working on his feet all day, better first thing in the morning, dull aching sensation with tenderness. No dysuria, no h/o trauma or STIs. He also mentions that he and his wife have been unable to conceive after actively trying for the past 13 months.**

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- **PMH: denies**
- **PSH: wisdom tooth extraction, tonsillectomy**
- **FH: mother with DM, father with HTN**
- **SH: no tobacco, ~6 beers per week, occ marijuana**
- **ROS: otherwise negative**

Varicocele-related Pain

- **What's next?**
  - **Physical Exam:**
    - BP 129/68, P 73, R 14, O2 99%, T 98.5F
    - Gen: A&O, NAD, ambulatory
    - Resp: non-labored on RA
    - CV: adequate perfusion, no edema
    - Abd: soft, non-tender, non-distended, no masses
    - GU: circumcised, right testis normal, left testis slightly atrophied and ttp with grade 2 varicocele, no masses, bilateral vasa palpable

Varicocele-related Pain

- **Keys to the Physical Exam[1]**

Grade	Description
Subclinical	Only detectable on ultrasound
Grade 1	Palpable only during Valsalva
Grade 2	Palpable without Valsalva
Grade 3	Visible

- Warm room
- Warm/relaxed scrotum
- Examine supine and standing
- Valsalva in standing position

1. Masson P, Brannigan RE. The varicocele. Urol Clin North Am. 2014 Feb;41(1):129-44. doi: 10.1016/j.ucl.2013.08.001. PMID: 24286772.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- A/P: 27yoM with 3mo of L > R scrotal pain, worse with activity, also noting difficulty conceiving. Grade 2 L varicocele on exam with some left testicular tenderness and atrophy. Varicocele confirmed on prior ultrasound.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- Most varicoceles are asymptomatic, but 10% may present with pain[1]
- Typically presents as heaviness, dull/aching discomfort, worse with standing/activity[1]
- Higher grade, more likely associated with pain[2]
  - No indication for surgery for subclinical varicoceles*

1. Owen RC, McCormick BJ, Figler BD, Coward RM. A review of varicocele repair for pain. Transl Androl Urol 2017;6(Suppl 1):S20–9.
2. Lomboy JR, Coward RM. The Varicocele: Clinical Presentation, Evaluation, and Surgical Management. Semin Intervent Radiol 2016;33(3):163–9.

Varicocele-related Pain

- **Any diagnostic testing?**
  - **Could consider UA and semen analysis**
  - **An ultrasound not necessary unless exam equivocal**
    - Diagnosis by US is vein diameter ≥3mm; US can diagnose clinical varicocele, but low sensitivity/specificity for distinguishing between Grades[1]
    - Routine abdominal imaging for isolated R varicocele no longer required unless new onset large/symptomatic R varicocele that does not decompress when supine[2]

1. Lehner K, Ingram C, Bansal U, Baca C, Balasubramanian A, Thirumavalavan N, Scovell JM, Rajanahally S, Pollard M, Lipshultz LI. Color Doppler ultrasound imaging in varicoceles: Is the difference in venous diameter encountered during Valsalva predictive of palpable varicocele grade? Asian J Urol. 2023 Jan;10(1):27-32.
2. Schlegel PN, Sigman M, Collura B, De Jonge CJ, Eisenberg ML, Lamb DJ, Mulhall JP, Niederberger C, Sandlow JI, Sokol RZ, Spandorfer SD, Tanrikut C, Treadwell JR, Oristaglio JT, Zini A. Diagnosis and treatment of infertility in men: AUA/ASRM guideline part I. Fertil Steril. 2021 Jan;115(1):54-61. doi: 10.1016/j.fertnstert.2020.11.015. Epub 2020 Dec 9. PMID: 33309062.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- **Treatment options**
  - **Meds, compressive undergarments**
  - **Cord block/Denervation**
  - **Varicocelectomy**
    - Varicocelectomy may not relieve pain in all cases, so conservative interventions should be considered first, and other sources of scrotal pain ruled out[1]
      - DDx spermatic vein thrombosis

1. Nagler HM, Grotas AB. Chapter 18: Varicocele. In: Infertility in the Male. The Edinburgh Building, Cambridge CB2 8RU, UK: Cambridge University Press; 2009. p332-61.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- **Surgical Approach**

Table 1: Summary of outcomes and complication rates (%) by repair technique for treatment of clinical varicoceles for infertile men.[134]

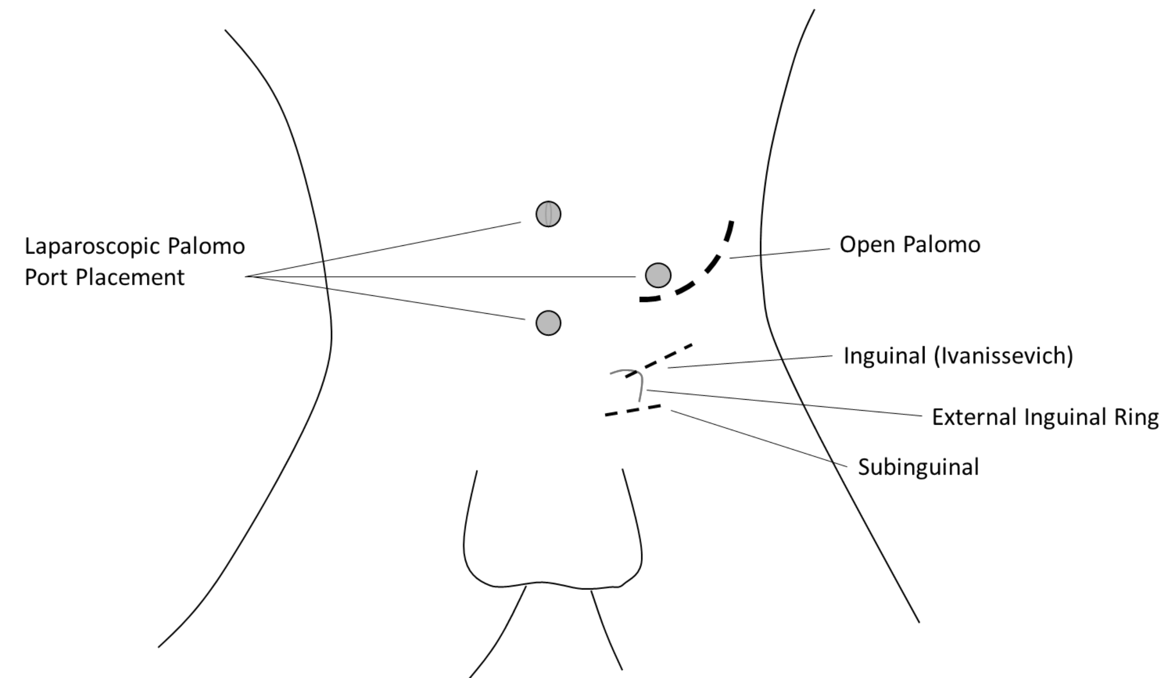
Repair Technique	Pregnancy Rates	Recurrence	Hydrocele Formation
Radiological	33.2	12.7	NR
Laparoscopic	30.1	4.3	2.8
Open Surgical			
Microscopic	**42.0**	**1.1**	**0.4**
Macroscopic			
High Retroperitoneal/Palomo	37.7	15.0	8.2
Inguinal/Ivanissevich	36	2.6	7.3

NR = Not Reported

Table 2: Summary of outcomes and complication rates (%) by repair technique for treatment of recurrent varicoceles.[133]

Repair Technique	Pregnancy Rates	Improvements in Semen Parameters	Recurrence	Testicular Atrophy	Hydrocele Formation	Hematoma/Infection
Radiological	17.9	62.5	3.3	NR	NR	3.6
Laparoscopic	58.8	NR	17.6	2.9	2.9	2.9
Open Surgical	42.4	77.5	3.8	0.3	3.1	1.5
Microscopic	NR	NR	0.6	0.0	2.3	1.1
Macroscopic	NR	NR	19	1.6	6.6	3.3

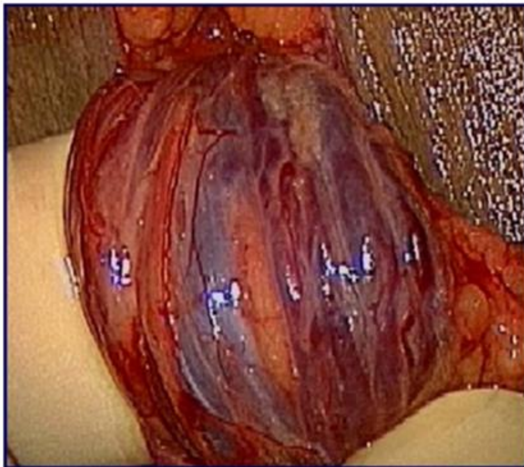
NR = Not Reported



Krzastek SC, Smith RP, Howards SS. The Varicocele-Approaches to Diagnosis and Management. In: Infertility in the Male. 5th ed.Cambridge: Cambridge University Press. 2023. pp. 253-276.

Varicocele-related Pain

- **Surgical Approach**
    - Subinguinal incision, identify and deliver the spermatic cord
    - Isolate cord with penrose/tongue depressor/Army-Navy
    - Operating microscope is used for maximal identification of critical cord structures
    - Open the external spermatic fascia
    - Visualize and ligate spermatic veins (suture, clips, +/- transection)



Surgical Pearls:
- Identify and preserve arteries, lymphatics, vas deferens
- Use bipolar for cautery and Doppler to confirm preservation or arterial flow
- Papavarine may be used as irrigation to identify the arterial signals

Varicocele-related Pain

- **Success rates: 53-90% complete resolution, 84-100% pain improvement[1]**
- **Predictors of Success[1-3]**
  - Pain of longer duration, dull, aching, heaviness, less severe
  - Varicocele Grade: unclear[3]
  - BMI: lower
  - Microsurgical subinguinal approach
  - Higher number of veins ligated[4]

1. Paick S, Choi WS. Varicocele and Testicular Pain: A Review. World J Mens Health.2019 Jan;37(1):4-11.
2. Owen RC, McCormick BJ, Figler BD, Coward RM. A review of varicocele repair for pain. Transl Androl Urol. 2017 May;6(Suppl 1): S20-S29.
3. Park JH, Pak K, Park NC, Park HJ. How Can We Predict a Successful Outcome after Varicocelectomy in Painful Varicocele Patients? An Updated Meta-Analysis. World J Mens Health. 2021 Oct;39(4):645-653.
4. Syarief AN, Rahman IA, Setiawan MR, Rizaldi F. The Influence of Number of Ligated Veins in Varicocele Patients Undergoing Microsurgical Varicocelectomy in Postoperative Pain and Sperm Parameters Outcome. Med Arch. 2023;77(4):299-305.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Varicocele-related Pain

- **Follow Up:**

Patient undergoes microscopic subinguinal left varicocelectomy and returns to your clinic in 6 weeks with significant improvement in pain.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Three Cases

- **Post-Vasectomy Pain Syndrome**
- **Varicocele-related Pain**
- **Idiopathic Orchialgia and Pelvic Pain**
- **Scrotal Content Pain**

Idiopathic Orchialgia and Pelvic Pain

- 56 yo gentleman with 8 month history of bilateral (L>R) scrotal and pelvic pain

Idiopathic Orchialgia and Pelvic Pain

- **What to ask?**
  - Onset, location, duration, character, aggravating/relieving factors, timing, severity
  - History: trauma, surgery, infection

Idiopathic Orchalgia and Pelvic Pain

- Pain is described as constant. Movement leads to 8/10 pain. Sitting/riding in cars is unbearable.
- Also reports pain with defecation
- NOTHING HELPS – debilitating and wheelchair bound

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- PMH: HTN, T2DM, lymphoma (chemo)
- PSH: knee replacement, vasectomy

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- After questioning… was rear-ended in a MVC
  - Trauma work-up negative but pain (back and pelvic) worse after incident

Idiopathic Orchialgia and Pelvic Pain

- **Physical Exam:**
  - BP 129/68, P 73, R 14, O2 99%, T 98.5F
  - Gen: A&O, NAD, ambulatory
  - GU: circumcised, right testis normal, left testis normal, bilateral cords tender TTP, inguinal + suprapubic region TTP

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- What next?
  - NSAIDs, TCAs, gabapentin
  - Pelvic floor PT
  - Cord block and possible surgical intervention for neuropathic pain

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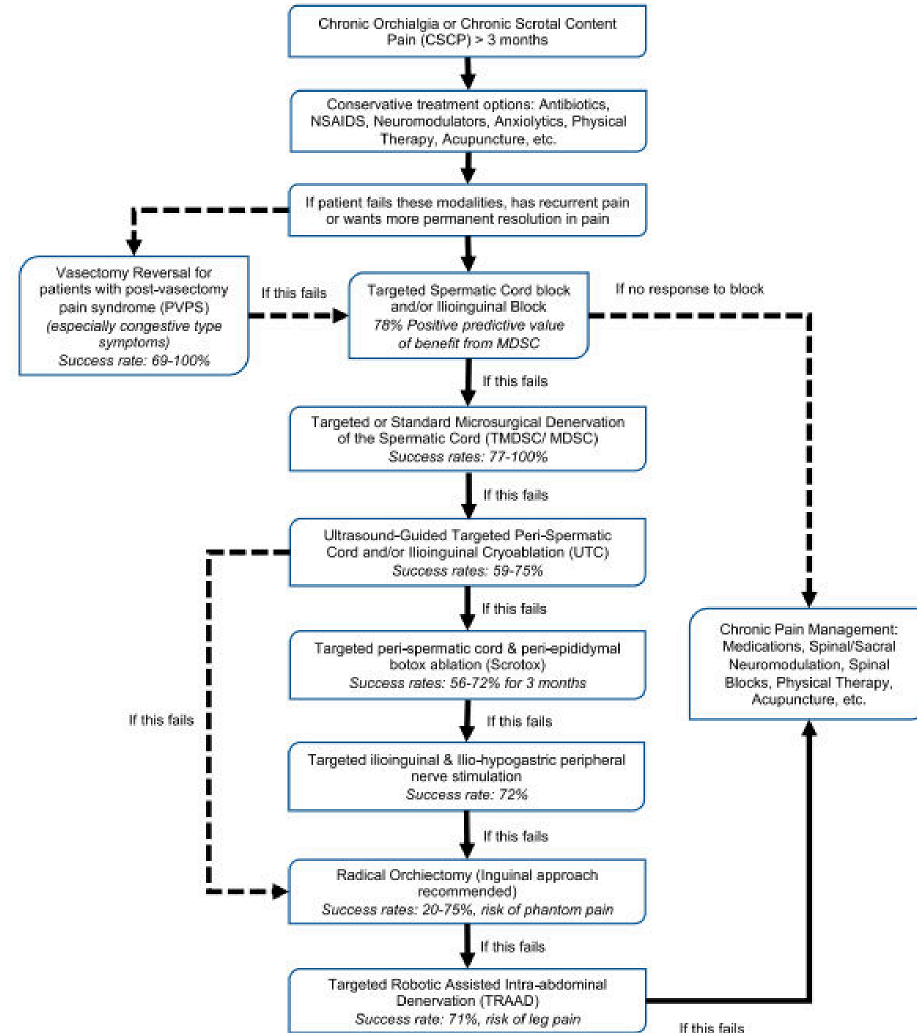
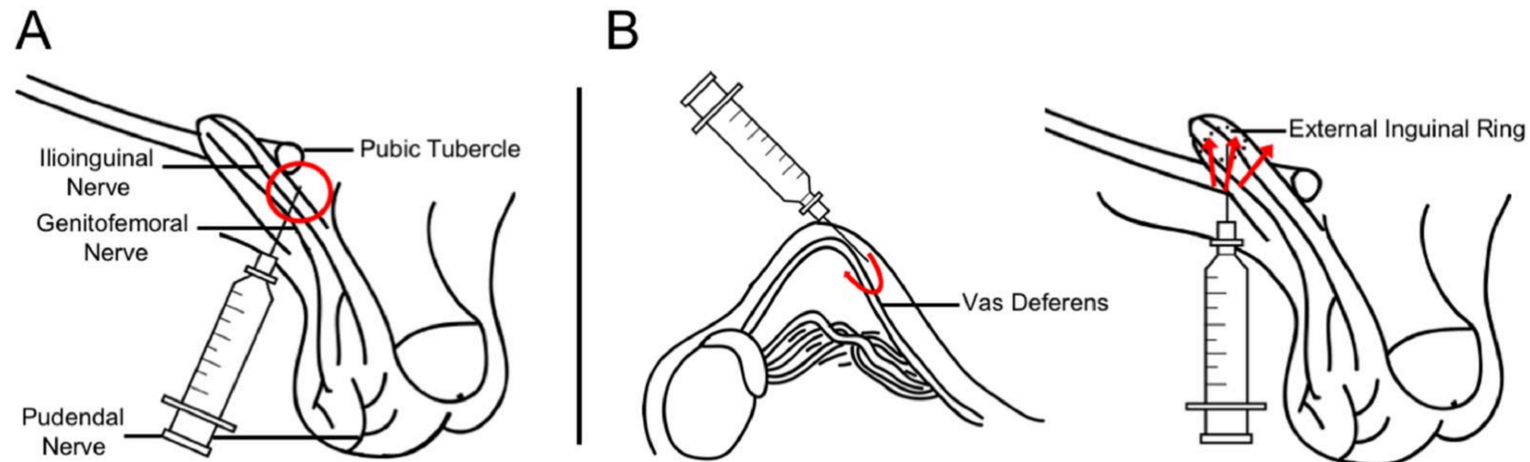


Figure 1 Chronic orchialgia or chronic scrotal content pain (CSP) management algorithm.

Parekattil SJ, Ergun O, Gudeloglu A. Management of Chronic Orchialgia: Challenges and Solutions - The Current Standard of Care. Res Rep Urol. 2020 Jul 2;12:199-210. doi: 10.2147/RRU.S198785. PMID: 32754451; PMCID: PMC7351977.

Idiopathic Orchialgia and Pelvic Pain

Cord block:



Beamer MR, Pinkhasov A, Kravchick S. Preoperative Modified Spermatic Cord Block Predicts Success in Candidates for Microscopic Spermatic Cord Denervation. Urology. 2021 Oct;156:31-36. doi: 10.1016/j.urology.2021.04.033. Epub 2021 May 4. PMID: 33961892.

Idiopathic Orchialgia and Pelvic Pain

- Cord block
  - 80% improvement in pain for 2 weeks… but then return of symptoms
  - Next steps?

Beamer MR, Pinkhasov A, Kravchick S. Preoperative Modified Spermatic Cord Block Predicts Success in Candidates for Microscopic Spermatic Cord Denervation. Urology. 2021 Oct;156:31-36. doi: 10.1016/j.urology.2021.04.033. Epub 2021 May 4. PMID: 33961892.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- Microscopic cord denervation
  - Offer surgical intervention
  - Adequate counseling of risks and post-operative expectations

Beamer MR, Pinkhasov A, Kravchick S. Preoperative Modified Spermatic Cord Block Predicts Success in Candidates for Microscopic Spermatic Cord Denervation. Urology. 2021 Oct;156:31-36. doi: 10.1016/j.urology.2021.04.033. Epub 2021 May 4. PMID: 33961892.

Idiopathic Orchialgia and Pelvic Pain

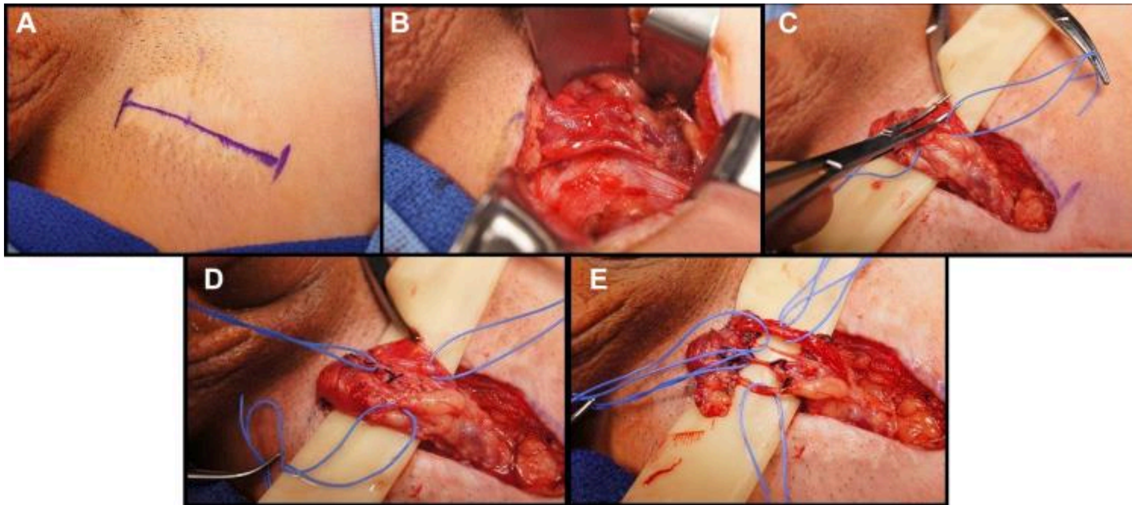
- Microscopic cord denervation
  - Ligation of all cord structures (excluding arteries and lymphatics)
  - Neurectomy of ilioinguinal, genitofemoral nerves at the external ring

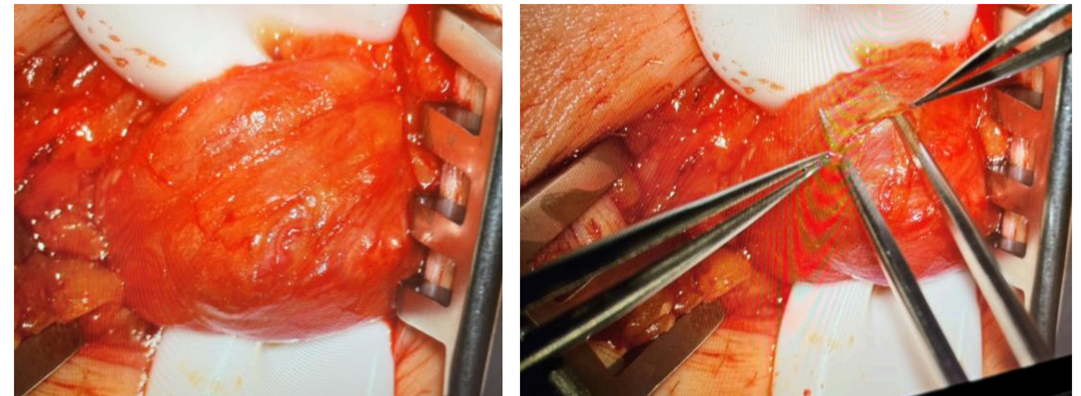
Tan WP, Levine LA. Micro-Denervation of the Spermatic Cord for Post-Vasectomy Pain Management. Sex Med Rev. 2018 Apr;6(2):328-334. doi: 10.1016/j.sxmr.2017.06.002. Epub 2017 Jul 21. PMID: 28735684.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- **Microscopic cord denervation**



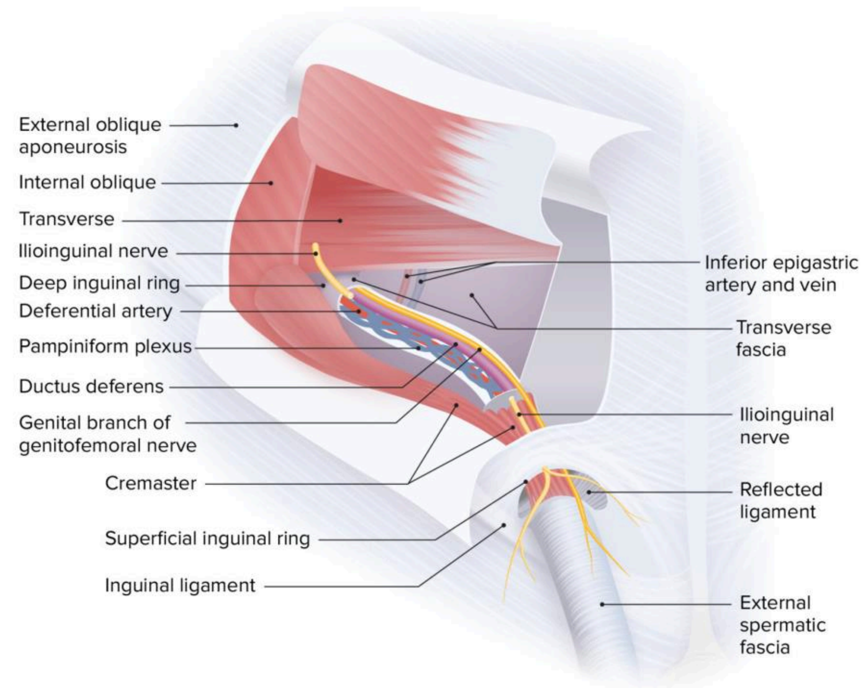


Tan WP, Levine LA. Micro-Denervation of the Spermatic Cord for Post-Vasectomy Pain Management. Sex Med Rev. 2018 Apr;6(2):328-334. doi: 10.1016/j.sxmr.2017.06.002. Epub 2017 Jul 21. PMID: 28735684.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- **Microscopic cord denervation**



CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Idiopathic Orchialgia and Pelvic Pain

- Success rates
  - ~75% of patients report improvement
  - Presence of pelvic floor muscle spasms as predictor of failure

Murthy PB, Parekh NV, Vij SC, Shoskes DA. Microscopic spermatic cord denervation for chronic orchialgia/chronic scrotal content pain: operative outcomes and predictors of failure. Transl Androl Urol. 2020 Oct;9(5):1931-1936. doi: 10.21037/tau-20-561. PMID: 33209657; PMCID: PMC7658118.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

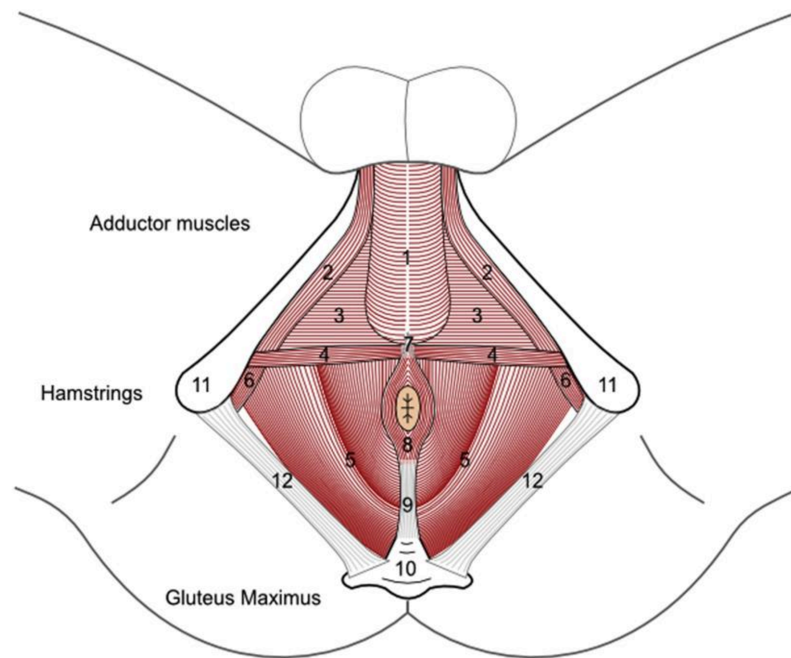
Idiopathic Orchialgia and Pelvic Pain

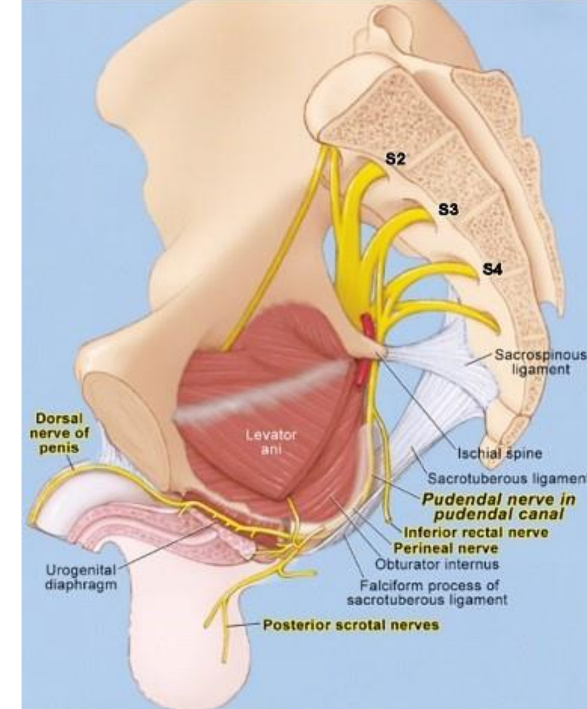
- Returns to clinic at 8 weeks
  - 70% improvement in pain.. But still can't ride in the car
  - Other options?

Idiopathic Orchialgia and Pelvic Pain

- Presenting symptoms and failure to completely respond suggest some component of pelvic floor dysfunction

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS





Cohen D, Gonzalez J, Goldstein I. The Role of Pelvic Floor Muscles in Male Sexual Dysfunction and Pelvic Pain. Sex Med Rev. 2016 Jan;4(1):53-62. doi: 10.1016/j.sxmr.2015.10.001. Epub 2016 Jan 8. PMID: 27872005.

Idiopathic Orchialgia and Pelvic Pain

- Trial of pelvic floor PT improves discomfort and he is now functional

Four Cases

- **Post-Vasectomy Pain Syndrome**
- **Varicocele-related Pain**
- **Idiopathic Orchialgia and Pelvic Pain**
- **Scrotal Content Pain**

Scrotal Content Pain

- **56-year-old gentleman with history of vasectomy 12 years ago and recurrent left testicular pain**
- **Presents for a second opinion after recent surgical intervention**

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Scrotal Content Pain

- **Left-sided scrotal pain post-vasectomy**
- **Baseline symptoms**:
  - No voiding symptoms
  - Reproducible TTP overlying left epididymis
  - Pain is "pressure" exacerbated by sitting
  - Failed antibiotics x 2
  - Failed NSAIDS, support
  - Imaging identified 2.5 cm left spermatocele
  - QOL impaired

Key History Elements:

- Unilateral vs bilateral scrotal pain?
- Systemic pain outside the scrotum?
- Neuropathic pain? (radiation to scrotum)
- Any associated perineal pain, suprapubic pain, penile pain, ejaculatory pain, dysuria, significant bladder storage symptoms that may indicated possible CP/CPPS and IC/BPS?
- Surgical history?
- Use Chronic Orchialgia Symptom Index

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Scrotal Content Pain

- **PMH: Pre-Diabetes**
- **PSH: Vasectomy**
- **SH: no tobacco or substance use**
- **ROS: Fatigue, Scrotal pain**

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Scrotal Content Pain

- **Physical Exam:**
  - Gen: A&O, NAD
  - Abd: soft, non-tender, non-distended, no masses, no hernia
  - GU: TTP over left epididymis with spermatocele cluster appreciated, testes are descended and demonstrate no masses, normal volume, thick spermatic cords, s/p vasectomy without granulomas

What would you offer this patient?

Scrotal Content Pain

- What would you offer this patient?
  - Pharmacologic pain management
  - Spermatic cord block→MSCD
  - Unilateral/Bilateral Vasectomy Reversal
  - Pain management
  - PFPT/Acupuncture
  - Spermatocelectomy/Epididymectomy
  - Orchiectomy
  - Other

Scrotal Content Pain

- s/p left spermatocelectomy/epididymectomy
  - Complicated by 11 cm scrotal hematoma, taken back for hematoma evacuation and drain placement
  - Imaging shows some atrophy, segmental infarct to left testis, residual 4 cm hematoma, complex fluid collection 1 month after
  - Now referred for second opinion

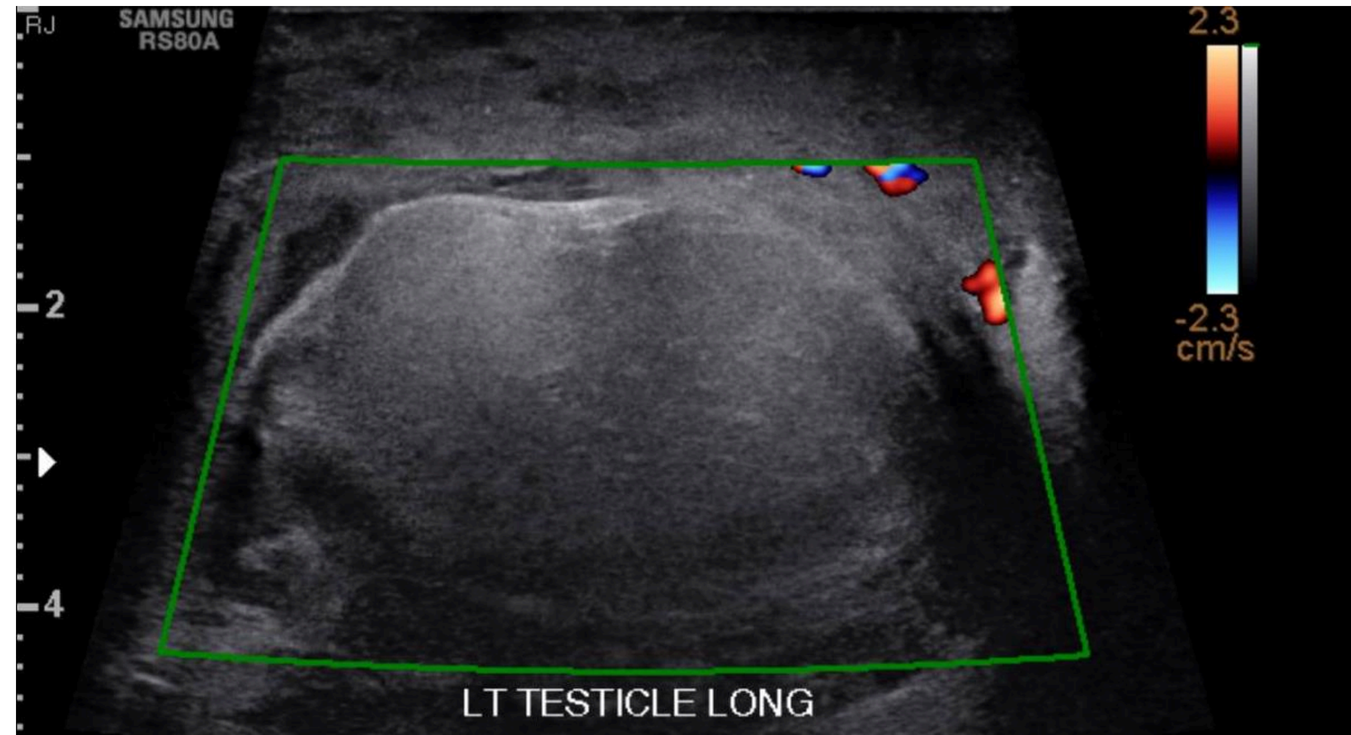
Scrotal Content Pain

- **Physical Exam:**
  - Gen: A&O, NAD
  - Abd: soft, non-tender, non-distended, no masses, no hernia
  - GU: Descended on right with normal contours, firm, rock-hard, crescent shaped mass in left hemiscrotum. Healed transverse left hemiscrotal incision and inferior drain site. No drainage or erythema. No tenderness on palpation. Testis is nonpalpable. No erythema or signs of infection.

CASE-BASED DISCUSSION OF CHRONIC MALE PELVIC PAIN SCENARIOS

Scrotal Content Pain

- **Imaging:**



What would you offer this patient?

Scrotal Content Pain

- **Now s/p Orchiectomy**

FINAL DIAGNOSIS AND ATTENDING SIGNATURE
A. LEFT TESTICLE, ORCHIECTOMY:
NECROSIS WITH ABSCESS AND BACTERIA.

- **A Cautionary Tale**

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Q&A

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Thank you!