

# A simplified treatment algorithm for chronic scrotal content pain syndrome

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## Abstract

**Background:** Chronic scrotal content pain (CSCP) is a devastating condition characterized by localized scrotal pain that persists for  $\geq 3$  months and interferes with daily activities. Approximately 2.5% of all urology outpatient visits are associated with CSCP. General urologists may have difficulty treating these patients because of uncertainties regarding the etiology and pathophysiology of CSCP. Therefore, we aimed to provide a simplified diagnostic and treatment approach for CSCP by subdividing it into distinct categories.

**Materials and methods:** We systematically reviewed the published literature in the PubMed, MEDLINE, and Cochrane databases for all reports on CSCP diagnosis and treatment using the keywords "chronic scrotal content pain," "testicular pain," "orchialgia," "testicular pain syndrome," "microdenervation of the spermatic cord," "post-vasectomy pain syndrome," "post-inguinal hernia repair pain," "testialgia," and "pudendal neuralgia." This review included only CSCP-related articles published in English language.

**Results:** We subdivided CSCP syndrome into 5 clinical presentation types, including hyperactive cremasteric reflex, pain localized in the testicles, pain in the testis, spermatic cord, and groin, pain localized in the testicles, spermatic cord, groin, and pubis, and pain in the testicles, spermatic cord/groin, and penis/pelvis. Treatments were adjusted stepwise for each type and section. We included more information regarding the role of pudendal neuroglia in CSCP syndrome and discussed more options for nerve blocks for CSCP. For microsurgical spermatic cord denervation failure, we included treatment options for salvage ultrasound-guided targeted cryoablation, Botox injections, and posterior-inferior scrotal denervation.

**Conclusions:** Different CSCP subtypes could help general urologists assess the appropriate diagnostic and treatment approaches for scrotal pain management in daily practice.

**Keywords:** Chronic scrotal content pain; Testicular pain; Orchialgia; Testicular pain syndrome; Microdenervation of the spermatic cord; Postvasectomy pain syndrome; Postinguinal hernia repair pain; Testialgia; Pudendal neuralgia

## 1. Introduction

According to Davis et al.,<sup>[1]</sup> chronic scrotal content pain (CSCP) is defined as intermittent or constant scrotal content pain that lasts for more than 3 months and interferes with daily activities. Recently, Leslie et al.<sup>[2]</sup> found that CSCP interferes with patients' daily activities and quality of life, prompting them to seek help; it is responsible for 2.5% to 4.8% of all urology outpatient visits and affects more than 100,000 men annually.

The pain is idiopathic in nearly 50% of cases, and any pathology that shares a nerve pathway from T10 to L2 and S2 to S4 may refer pain to the inguinal-scrotal area.<sup>[3,4]</sup> General urologists often feel ill-equipped to treat CSCP; consequently, patients see an average

of 4.5 physicians and undergo 7.2 diagnostic interventions before finding adequate treatment.<sup>[5,6]</sup> Although multiple treatment algorithms have been proposed, no definitive consensus has been reached. This study primarily aimed to provide a simplified treatment algorithm and guidance for general urologists regarding workup and management options.

## 2. Materials and methods

We systematically reviewed the published literature in the PubMed, MEDLINE, and Cochrane databases for all reports regarding CSCP diagnoses and treatments. We used the following keywords: "chronic scrotal content pain," "testicular pain," "orchialgia," "testicular pain syndrome," "microdenervation of the spermatic cord," "post-vasectomy pain syndrome," "post-inguinal hernia repair pain," "testialgia," and "pudendal neuralgia." This review included only articles published on CSCP in English between 1999 and 2022. All articles were reviewed, and 83 were selected according to the following criteria: human research review board approval, evidence-based assessment of CSCP, and evidence-based treatments for CSCP.

To provide comprehensive information to general urologists, we subdivided CSCP syndrome into 5 distinct types based on clinical

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presentation, as suggested by Parekattil et al.<sup>[7]</sup> We used classic diagnostics and stepwise treatment (Fig. 1), as previously reported,<sup>[3–6]</sup> and adjusted the treatments according to the type of chronic scrotal pain (Fig. 2). Information regarding the role of pudendal neuropathia in CSCP syndrome was incorporated into this review. We also included nerve blocks as a treatment option for CSCP. Furthermore, we included additional treatment options in the event of microsurgical spermatic cord denervation (MSCD) failure, such as ultrasound-guided targeted perispermatic cord/ilioinguinal cryoablation, Botox injections into the spermatic cord, and posterior inferior scrotal wall denervation.<sup>[8–10]</sup> Consequently, our algorithm incorporated detailed assessment and treatment information for each subcategory.

### 3. Assessment and treatment

Our summarized algorithm included a stepwise approach for each subtype of scrotal pain (Fig. 2).

#### 3.1. Type 1: Hyperactive cremasteric reflex

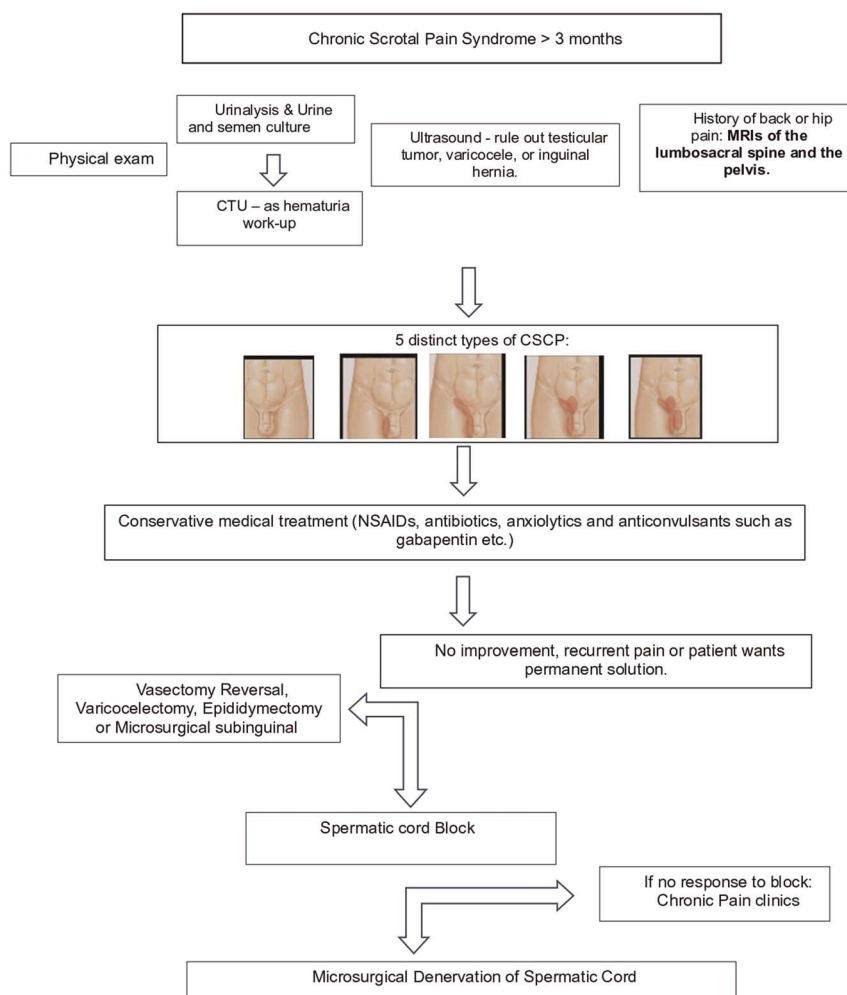
Drake et al.<sup>[11]</sup> showed that the cremasteric reflex uses sensory and motor fibers from the genitofemoral and ilioinguinal nerves. When

the inner thigh is rubbed, motor fibers are activated, causing the cremaster muscle to contract and elevate the testis. Therefore, in this subcategory, physical examination is critical to investigate whether a hyperactive cremaster reflex pulls the testicle into the groin, causing a dull, heavy ache. Patients often “milk” the testicle back to the scrotum.

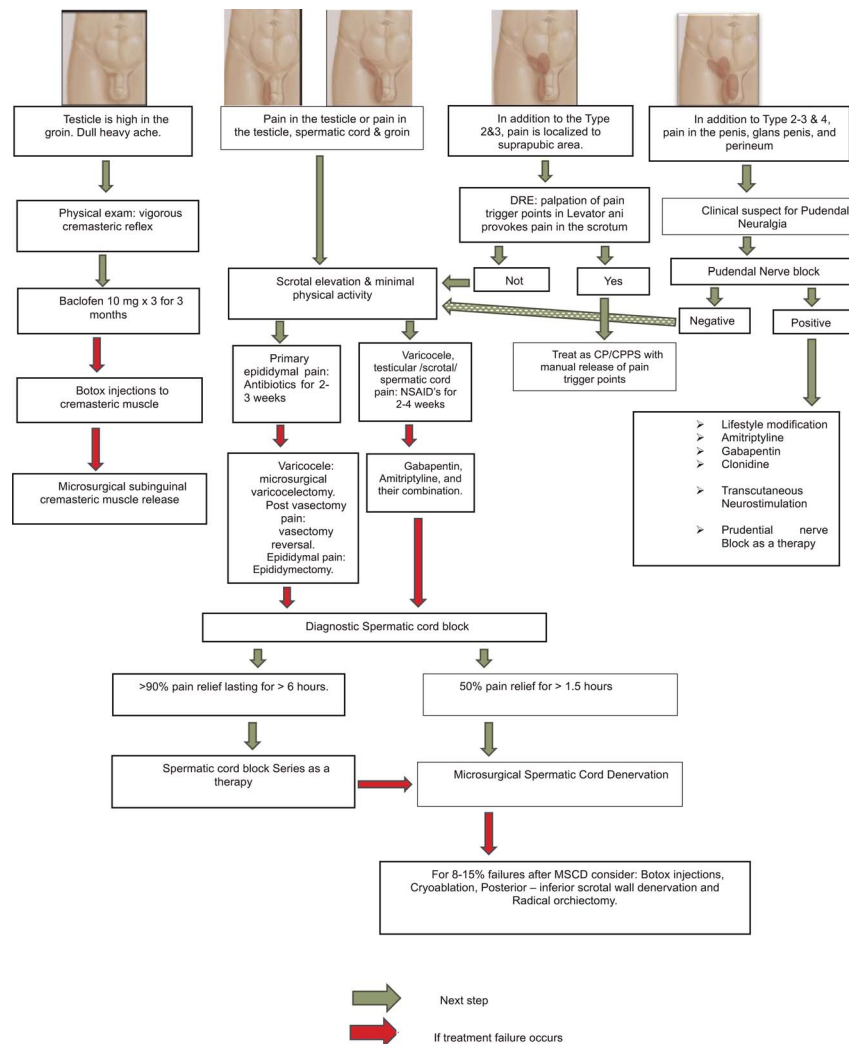
Factors causing this condition include physical exercise, sexual intercourse, and changing positions from sitting to standing or vice versa.<sup>[12]</sup>

Mohseni-Rad et al.<sup>[13]</sup> found that baclofen 10 mg 8 hourly for 3 months and a daily sitz bath may be beneficial first-line treatments for this category. Khambati et al.<sup>[14]</sup> also demonstrated the effectiveness of Botox injections (100 U of onabotulinum toxin A diluted in 10 mL of saline medial, administered lateral to the spermatic cord at the external inguinal ring), with success rates of 72% and 56% at 1- and 3-month follow-ups, respectively. Recently, Kavoussi<sup>[12]</sup> reported the results of microsurgical subinguinal cremaster muscle release in patients with CSCP syndrome caused by cremasteric hyperreflexia. In their case series, 92% of patients reported complete pain resolution.

Based on the above findings, we suggest the following stepwise approach for this category of patients: (a) baclofen 10 mg 8 hourly for 3 months and a daily sitz bath as first-line treatment, (b) Botox injection into the cremasteric muscles as second-line treatment, and



**Figure 1.** Diagnostic and stepwise treatment. CSCP = chronic scrotal content pain; CTU = computed tomography urography; MRI = magnetic resonance imaging; NSAIDs = nonsteroidal anti-inflammatory drugs.



**Figure 2.** Summarized algorithm for assessment and treatment of patients with chronic scrotal content pain. CP/CPPS = chronic prostatitis/chronic pelvic pain syndrome; DRE = digital rectal examination; MSCD = microsurgical spermatic cord denervation; NSAIDs = nonsteroidal anti-inflammatory drugs.

(c) microsurgical subinguinal cremaster muscle release as a potential third-line treatment.

### 3.2. Types 2 and 3: Pain localized in the testicles or pain in the testis, spermatic cord, and groin

We combined types 2 and 3 because of their similarities in presentation and treatment. This subgroup accounts for 70% of patients with CSCP and includes the following:

- Primary testicular pain syndrome: Pain is perceived in the testes.
- Primary epididymal pain syndrome: Pain is perceived in the epididymis.
- Primary scrotal pain syndrome: Patients indicate scrotal pain but are unable to specify its location.<sup>[15]</sup>
- Scrotal varicocele: Between 2% to 10% and 31% of patients with scrotal varicocele complain of pain.<sup>[16,17]</sup>
- Pain localized in the spermatic cord: Pain trigger points are near or at the vas deferens, and distinct lesions provoke pain.
- Postvasectomy scrotal pain syndrome: The incidence is 2% to 20%, and the likelihood after 6 months is 14.7%; 5% to 6% have a visual analog scale score >5.<sup>[15,18]</sup> However, only 5% of vasectomized patients seek medical attention because of testicular pain.

- Scrotal pain postinguinal hernia repair: The incidence is 10% to 14.7%, and the frequency is significantly higher in patients undergoing laparoscopic repair than in those undergoing open repair. Approximately 10% of patients experience pain at 6 months.<sup>[15,19]</sup>

Classically, first-line treatment includes lifestyle adjustments and treatment with medications. Lifestyle modifications include the use of tighter-fitting underwear, scrotal support, ice/compression, and refraining from activities that evoke pain.<sup>[3–6]</sup> However, medical treatment depends on disease etiology. As shown by Lai et al.<sup>[20]</sup> and Callear et al.,<sup>[21]</sup> a 2- to 4-week course of empiric antibiotics resolved pain in 26% to 87% of patients with primary epididymal pain syndrome. All other clinical entities in these subgroups (types 2 and 3) can be treated with a 2- to 4-week trial of nonsteroidal anti-inflammatory drugs.<sup>[22,23]</sup>

If pain is refractory to first-line treatment, second-line treatment may include gabapentin 300 mg 8 hourly with or without amitriptyline 10 to 20 mg daily for 3 months. Sinclair et al.<sup>[24]</sup> reported pain improvement rates as high as 61.5% with these treatments. However, several studies have indicated that several subcategories should be excluded from this “conservative” second-line treatment. For instance, Callear et al.<sup>[21]</sup> demonstrated that epididymectomy

was successful in 50% to 87% of patients with primary epididymal pain. Correspondingly, Cho et al.<sup>[16]</sup> reported that microscopic varicocelectomy efficaciously resolved pain caused by varicoceles in 90% of cases. Nangia et al.<sup>[25]</sup> and Myers et al.<sup>[26]</sup> reported that patients with postvasectomy scrotal pain syndrome benefit from vasectomy reversal; 50% to 69% experience improvement in pain symptoms. Benson et al.<sup>[27]</sup> showed that when second-line treatment fails, spermatic cord block with 20 mL 0.25% bupivacaine predicts a positive response to MSCD. Two approaches for the spermatic cord block (Fig. 3) have been previously described.<sup>[28,29]</sup> Patients reporting pain improvement of 50% or greater on the visual analog scale with a pain relief period of 1.5 to 4 hours can be considered candidates for MSCD, which achieves durable pain relief in 71% to 96% of cases.<sup>[30,31]</sup> For patients experiencing greater than 90% temporary pain relief lasting more than 6 hours, a series of spermatic cord blocks with 9 mL 0.5% bupivacaine and 10 mg of triamcinolone acetonide (4 or 5 blocks with a 2- to 3-week interval) can be offered. Recently, Simon et al.<sup>[32]</sup> reported a positive response in 70.5% of their patients.

Several treatment options exist for patients in whom MSCD fails. Botox injections into the spermatic cord can be considered a reasonable next step, as described by Ergun et al.,<sup>[10]</sup> who reported significant pain relief in 63% of patients. Calixte et al.<sup>[8]</sup> used ultrasound-targeted cryotherapy as an alternative minimally invasive model to MSCD. In that study, a 16-gauge cryoneedle (Endocare, HealthTronics, Austin, TX) was introduced at the level of the external inguinal ring, medial and lateral to the spermatic cord, ablating the branches of the genitofemoral, ilioinguinal, and inferior hypogastric nerves. After a median 36-month follow-up period, 75% of the patients reported significant pain reduction.

A posterior-inferior scrotal block and denervation can be considered if these methods fail. The idea for using these techniques was based on previously reported anatomical data indicating substantial crossover and overlap of sensory input from the ilioinguinal and genitofemoral nerve branches that innervate the anterior and antero-lateral scrotum and branches of the pudendal/perineal nerve that innervate the posterior scrotum.<sup>[33–35]</sup> Consequently, although the genitofemoral and ilioinguinal nerves are targets of the MSCD, the scrotal branches of the perineal/pudendal and posterior femoral cutaneous nerves are not. After obtaining institutional review board approval (no. IRB00003573, FWA#FWA00004997, 10.072019, and 07.152020), we recently conducted a study on posterior-inferior scrotal block and denervation,<sup>[9]</sup> achieving pain reduction in 82% of patients.

Radical orchiectomy may only be considered a last resort. Although this approach poses a risk of phantom pain, it achieves a success rate of 20% to 75%.<sup>[10]</sup>

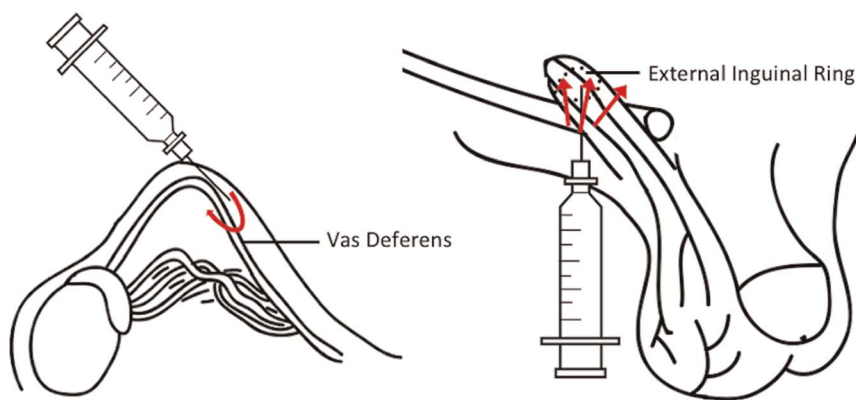
### 3.3. Type 4: Pain localized in the testicles, spermatic cord, groin, and pubis

Type 4 is associated with scrotal and suprapubic pain, in addition to types 2 and 3. In this context, 58% of men with chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) reported comorbid suprapubic and scrotal pain.<sup>[36,37]</sup> Rectal examination may reveal pain trigger points in the levator muscles that provoke pain in the scrotum. For these patients, we recommend starting multimodal therapy for CP/CPPS, including antibiotics, modulation of inflammatory processes, and manual release of pain-related trigger points.<sup>[38]</sup> Recently, Barone et al.<sup>[39]</sup> reported the benefits of using a combination of antibiotics and a new phytotherapeutic compound, logofilm. The same stepwise treatments described for types 2 and 3 may be considered if no pain trigger point is found.

### 3.4. Type 5: Pain localized to the penis, glans penis, perineum, and rectum, in addition to the previously described types

Penile pain with or without irradiation of the penile gland and perineum distinguishes this subgroup from the others. Levesque et al.<sup>[40]</sup> showed that pudendal neuralgia affected 4% of all patients undergoing consultations for penile and perineal pain, urinary frequency, urgency, painful ejaculation/discomfort after intercourse, painful nocturnal orgasms, and persistent sexual arousal. Pain is generally lower in the morning and progressively increases throughout the day and can be described as burning, stabbing, and electric shock sensations. In more than 50% of patients, pain is exacerbated while sitting; however, it is relieved while lying, standing, or sitting on the toilet. Dickson et al.<sup>[41]</sup> reported that a positive pudendal nerve block can confirm the diagnosis.

Lifestyle modifications are recommended, including an inflatable “doughnut” cushion and cessation of hip flexion exercises (cycling, jogging, rowing, or similar sporting activities). Treatment with medications includes amitriptyline 10 mg at bedtime, titrated every 5 days to a maximum of 50 mg at bedtime as tolerated; duloxetine 30 mg daily for 1 week, subsequently increased to 60 mg daily; gabapentin 300 mg 8 hourly, titrated up to 900 mg 8 hourly; and clonidine 0.1 mg at bedtime, which can be beneficial in controlling sympathetically moderated pain.<sup>[40]</sup> An alternative treatment described by Guo et al.<sup>[42]</sup> involves transcutaneous



**Figure 3.** Spermatic cord blocking technique. (A) Modified spermatic cord block: 10 to 15 mL of 0.25% bupivacaine is injected circumferentially around the vas deferens, and an additional 5 to 10 mL is injected anterior, medial, and lateral to the external inguinal ring. (B) Traditional spermatic cord block: 10 to 20 mL 0.25% bupivacaine is injected 1 cm inferior and medial to the pubic tubercle.



electrical nerve stimulation, including posterior tibial stimulation. Sharma et al.<sup>[43]</sup> reported the greatest benefit in patients who received the highest tested frequency of 75 to 100 Hz.

Second-line therapy includes a pudendal nerve block in a therapeutic series comprising 3 blocks administered at 4-week intervals. A mixture of 1% lidocaine, 0.25% bupivacaine, and 10 mg of triamcinolone may be used. Relief usually occurs 3 to 5 days after the injection and lasts 3 to 5 weeks or longer. However, Hibner et al.<sup>[44]</sup> found that approximately only 25% of patients reported pain relief lasting 1 month or more.

#### 4. Conclusions

The subdivision of scrotal pain syndrome into 5 types may help general urologists focus their assessment efforts while considering the possible overlap of symptoms caused by CP/CPSP and pudendal neuralgia. We suggest starting with a combination of lifestyle modifications and first- and second-line treatments. If these treatments fail, patients may be referred to urologists who are more familiar with different types of nerve blocks and invasive procedures, such as MSCD. The proposed algorithm simplifies the stepwise treatment process. Microsurgical spermatic cord denervation remains a valuable approach with reasonable success rates; however, several alternative treatment options may be considered after MSCD failure. We hope our algorithm will help urologists be more confident in treating these patients.

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#### Statement of ethics

Not applicable.

#### Conflict of interest statement

No conflict of interest has been declared by the author.

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#### Author contributions

SK, SJP: conceived and designed the classification and treatment algorithm;  
SK: collected the data and wrote the paper;  
GB: contributed to the design and implementation of the subclassification and treatment algorithm;  
MRB: literature search and graphic design;  
RM: made a substantial contribution to the concept and design of the article;  
DS: took the lead in writing and correction of the manuscript;  
JCN: drafted the article and revised it critically and approved the version to be published.

#### Data availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

#### References

- [1] Davis BE, Noble MJ, Weigel JW, Foret JD, Mebust WK. Analysis and management of chronic testicular pain. *J Urol* 1990;143(5):936–939.
- [2] Leslie SW, Sajjad H, Siref LE. *Chronic Testicular Pain and Orchalgia*. Treasure Island, FL: Stat Pearls Publishing; 2023.
- [3] Levine LA, Hoeh MP. Evaluation and management of chronic scrotal content pain. *Curr Urol Rep* 2015;16(6):36.
- [4] Tan WP, Levine LA. What can we do for chronic scrotal content pain? *World J Mens Health* 2017;35(3):146–155.
- [5] Calixte N, Brahmabhatt J, Parekattil S. Chronic testicular and groin pain: Pathway to relief. *Curr Urol Rep* 2017;18(10):83.
- [6] Ciftci H, Savas M, Yeni E, Verit A, Topal U. Chronic orchialgia and associated diseases. *Curr Urol* 2010;4(2):67–70.
- [7] Parekattil SJ, Gudeloglu A, Brahmabhatt JV, Priola KB, Vieweg J, Allan RW. Trifecta nerve complex: Potential anatomical basis for microsurgical denervation of the spermatic cord for chronic orchialgia. *J Urol* 2013;190(1):265–270.
- [8] Calixte N, Kartal IG, Tojuola B, et al. Salvage ultrasound-guided targeted cryoablation of the perispermatic cord for persistent chronic scrotal content pain after microsurgical denervation of the spermatic cord. *Urology* 2019;130:181–185.
- [9] Beamer M, Kravchick S. Posterior- inferior scrotal denervation: Potential treatment for patients with refractory scrotal pain after microscopic spermatic cord denervation (MSCD), American Urological Association (AUA) annual meeting, 2021.
- [10] Ergun O, Gudeloglu A, Parekattil SJ. Management of chronic orchialgia: Review of current clinical practice. *AME Med J* 2023;8:22.
- [11] Drake RL, Vogl W, Tibbitts AWMM. *Gray's Anatomy for Students*. Philadelphia: Elsevier/Churchill Livingstone; 2005. Illustrations by Tibbitts R, Richardson P.
- [12] Kavoussi PK. Microsurgical subinguinal cremaster muscle release for chronic orchialgia secondary to hyperactive cremaster muscle reflex in adults. *Andrologia* 2020;52(1):e13493.
- [13] Mohseni-Rad H, Razzaghdoust A, Mishan MA, Gholamrezaie HR, Hosseinkhani A. Terazosin or baclofen in young men with chronic orchialgia: A cohort study of 499 patients. *Urologia* 2020;87(1):35–40.
- [14] Khambati A, Lau S, Gordon A, Jarvi KA. OnabotulinumtoxinA (Botox) nerve blocks provide durable pain relief for men with chronic scrotal pain: A pilot open-label trial. *J Sex Med* 2014;11(12):3072–3077.
- [15] EAU Guidelines. Presented at the EAU Annual Congress; Amsterdam, the Netherlands; 2022.
- [16] Cho CL, Esteves SC, Agarwal A. Indications and outcomes of varicocele repair. *Panminerva Med* 2019;61(2):152–163.
- [17] Punjani N, Wald G, Gaffney CD, Goldstein M, Kashanian JA. Predictors of varicocele-associated pain and its impact on semen parameters following microsurgical repair. *Andrologia* 2021;53(8):e14121.
- [18] Morris C, Mishra K, Kirkman RJ. A study to assess the prevalence of chronic testicular pain in post-vasectomy men compared to non-vasectomised men. *J Fam Plann Reprod Health Care* 2002;28(3):142–144.
- [19] Inaba T, Okinaga K, Fukushima R, et al. Chronic pain and discomfort after inguinal hernia repair. *Surg Today* 2012;42(9):825–829.
- [20] Lai Y, Yu Z, Shi B, Ni L, Liu Y, Yang S. Chronic scrotal pain caused by mild epididymitis: Report of a series of 44 cases. *Pak J Med Sci* 2014;30(3):638–641.
- [21] Callear JG, Masood J, Hill JT. Chronic epididymitis: Is epididymectomy a valid surgical treatment? *Int J Androl* 2009;32(5):468–472.
- [22] Jarvi KA, Wu C, Nickel JC, Domes T, Grantmyre J, Zini A. Canadian Urological Association best practice report on chronic scrotal pain. *Can Urol Assoc J* 2018;12(6):161–172.
- [23] Paick S, Choi WS. Varicocele and testicular pain: A review. *World J Mens Health* 2019;37(1):4–11.
- [24] Sinclair AM, Miller B, Lee LK. Chronic orchialgia: Consider gabapentin or nortriptyline before considering surgery. *Int J Urol* 2007;14(7):622–625.
- [25] Nangia AK, Myles JL, Thomas AJR. Vasectomy reversal for the post-vasectomy pain syndrome: A clinical and histological evaluation. *J Urol* 2000;164(6):1939–1942.
- [26] Myers SA, Mershon CE, Fuchs EF. Vasectomy reversal for treatment of the post-vasectomy pain syndrome. *J Urol* 1997;157(2):518–520.
- [27] Benson JS, Abery 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;10(3):876–882.
- [28] Kaye KW, Lange PH, Fraley EE. Spermatic cord block in urologic surgery. *J Urol* 1982;128(4):720–721.

- [29] Issa MM, Hsiao K, Bassel YS, Bouet R, Young MR, Petros JA. Spermatic cord anesthesia block for scrotal procedures in outpatient clinic setting. *J Urol* 2004;172(6 Pt 1):2358–2361.
- [30] Strom KH, Levine LA. Microsurgical denervation of the spermatic cord for chronic orchialgia: Long-term results from a single center. *J Urol* 2008;180(3):949–953.
- [31] Heidenreich A, Olbert P, Engelmann UH. Management of chronic testalgia by microsurgical testicular denervation. *Eur Urol* 2002;41(4):392–397.
- [32] Simon DP, Bajic P, Lynch KM, Levine LA. Spermatic cord block series as a minimally invasive therapy for chronic scrotal content pain. *J Urol* 2021;206(3):725–732.
- [33] Skandalakis JE, Colborn GL, Weidman TA. *Skandalakis' Surgical Anatomy: The Embryologic and Anatomic Basis of Modern Surgery*. University of Michigan: Paschalidis Medical Publication Ltd; 2004.
- [34] Patel AP. Anatomy and physiology of chronic scrotal pain. *Transl Androl Urol* 2017;6(Suppl 1):S51–S56.
- [35] Rab M, Ebmer And J, Dellon AL. Anatomic variability of the ilioinguinal and genitofemoral nerve: Implications for the treatment of groin pain. *Plast Reconstr Surg* 2001;108(6):1618–1623.
- [36] Wagenlehner FM, van Till JW, Magri V, et al. National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) symptom evaluation in multinational cohorts of patients with chronic prostatitis/chronic pelvic pain syndrome. *Eur Urol* 2013;63(5):953–959.
- [37] Engeler DS, Baranowski AP, Dinis-Oliveira P, et al. The 2013 EAU guidelines on chronic pelvic pain: Is management of chronic pelvic pain a habit, a philosophy, or a science? 10 Years of development. *Eur Urol* 2013;64(3):431–439.
- [38] Anderson RU, Sawyer T, Wise D, Morey A, Nathanson BH. Painful myofascial trigger points and pain sites in men with chronic prostatitis/chronic pelvic pain syndrome. *J Urol* 2009;182(6):2753–2758.
- [39] Barone B, Mirto BF, Falcone A, et al. The efficacy of flogofilm® in the treatment of chronic bacterial prostatitis as an adjuvant to antibiotic therapy: A randomized prospective trial. *J Clin Med* 2023;12(8):2784.
- [40] Levesque A, Bautrant E, Quistrebert V, et al. Recommendations on the management of pudendal nerve entrapment syndrome: A formalised expert consensus. *Eur J Pain* 2022;26(1):7–17.
- [41] Dickson E, Higgins P, Sehgal R, et al. Role of nerve block as a diagnostic tool in pudendal nerve entrapment. *ANZ J Surg* 2019;89(6):695–699.
- [42] Guo KK, Wang L, Liu F, et al. Sacral nerve stimulation in patients with refractory pudendal neuralgia. *Pain Physician* 2022;25(4):E619–E627.
- [43] Sharma N, Rekha K, Srinivasan JK. Efficacy of transcutaneous electrical nerve stimulation in the treatment of chronic pelvic pain. *J Midlife Health* 2017;8(1):36–39.
- [44] Hibner M, Desai N, Robertson LJ, Nour M. Pudendal neuralgia. *J Minim Invasive Gynecol* 2010;17(2):148–153.

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