Submitted: 21 September, 2025 Accepted: 10 November, 2025 Published: 30 March, 2026 DOI:10.22514/jomh.2026.027

CASE REPORT

JOMH Journal of Men's Health

Spontaneous resolution of penile sclerosing lymphangitis with conservative management: a case report and literature review

Rui Qu[1,*,†], Congyi Zhu[2,†], Luo Yang[1]

[1]Department of Urology and Pelvic Surgery and Andrology, West China School of Public Health and West China Fourth Hospital, Sichuan University, 610000 Chengdu, Sichuan, China
[2]West China School of Public Health and West China Fourth Hospital, Sichuan University, 610000 Chengdu, Sichuan, China

***Correspondence**
qurui@scu.edu.cn
(Rui Qu)

† These authors contributed equally.

Abstract

Background: Penile sclerosing lymphangitis is a rare, benign condition characterized by chronic inflammation and sclerosis of the penile lymphatic vessels. Due to its rarity and non-specific presentation, it is often underdiagnosed and misdiagnosed as other penile pathologies. **Case**: We report a case of a 39-year-old male who presented with an incidental, firm, cord-like structure along the dorsal penile shaft. The patient denied pain, discomfort, or erectile dysfunction and had no history of trauma or sexually transmitted infections. Physical examination and penile ultrasonography confirmed the diagnosis of penile sclerosing lymphangitis. The patient reduced the frequency of sexual activity or masturbation to once a week. At the 6-month follow-up, the lesion had completely resolved without pharmacological intervention. **Conclusions**: Penile sclerosing lymphangitis is a self-limiting condition that can resolve with conservative management and lifestyle modification. Increased awareness and accurate diagnosis are essential to avoid unnecessary interventions.

Keywords

Penile sclerosing lymphangitis; Lymphatic sclerosis; Penile cord; Differential diagnosis; Conservative management

1. Introduction

Sclerosing lymphangitis is a rare condition characterized by the chronic inflammation and subsequent sclerosis of the lymphatic vessels. It can affect various parts of the body, including the penis, which is known as penile sclerosing lymphangitis [1]. This condition is relatively uncommon and often underdiagnosed due to its rarity and the lack of awareness among healthcare providers. Penile sclerosing lymphangitis is a specific manifestation of general sclerosing lymphangitis, where the inflammatory and sclerotic process primarily involves the lymphatic vessels of the penis. The exact etiology of this condition is not fully understood, but it is believed to be related to various factors, including chronic irritation, trauma, or infection of the penile skin and lymphatic system [1, 2].

Epidemiologically, penile sclerosing lymphangitis is more frequently observed in middle-aged and older men, although cases have been reported across a wide age range. The true prevalence of this condition is unknown, as it is often underreported and underdiagnosed due to its rarity and the lack of awareness among healthcare providers. Currently, the research on penile sclerosing lymphangitis is limited, with only a few case reports and small case series published in the medical literature [1, 3]. There is a notable paucity of large-scale epidemiological studies, prospective clinical trials, and comprehensive investigations into the underlying pathophysiology, natural history, and standardized management protocols [1–3]. The present case report provides valuable insights into the clinical manifestation, diagnostic approach, and conservative management of penile sclerosing lymphangitis, which may contribute to a better understanding of this rare condition and inform future research and clinical practice.

All patient information has been deidentified, and written informed consent was obtained for the treatment and publication of this article and accompanying images.

2. Case presentation

A 39-year-old male patient presented to the clinic with an incidental finding of a cord-like structure along the penile shaft. The patient reported accidentally palpating this firm, non-tender structure while performing self-examination, but he denied any associated pain, discomfort, or erectile dysfunction. He had no history of penile trauma, sexually transmitted infections, or other relevant medical conditions. The patient reported engaging in sexual activity or masturbation approximately 1–3 times per week prior to presentation. He denied any distress, functional impairment, or relationship difficulties related to his sexual activity pattern.

Physical examination revealed a palpable, cord-like structure along the dorsal aspect of the penile shaft, which was firm and non-tender to the touch (Fig. 1). No other abnormalities

were noted on genital examination. Penile ultrasonography was performed, which demonstrated thickening and increased echogenicity of the penile lymphatic vessels, without evidence of thrombosis or other vascular pathology.

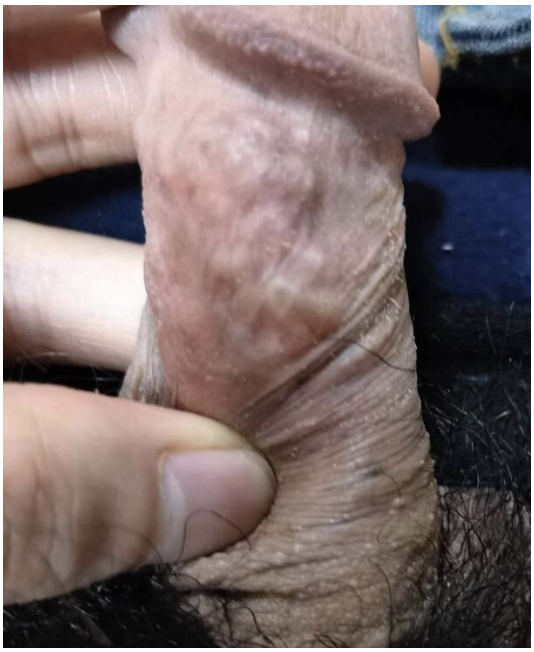

FIGURE 1. Physical examination revealed a cord-like structure palpable on the dorsal aspect of the penile body, firm in consistency and painless on compression. Genital examination revealed no other abnormalities.

Based on the clinical presentation and imaging findings, a diagnosis of penile sclerosing lymphangitis was made. While histopathological examination would provide definitive diagnostic confirmation, the combination of characteristic clinical and ultrasonographic findings supported a confident clinical diagnosis. Given the benign and self-limiting nature of this condition, invasive biopsy was deemed unnecessary and would have exposed the patient to unwarranted risks without altering management [4]. The patient was advised to reduce the frequency and intensity of sexual activity or masturbation, and no pharmacological treatment was prescribed. The patient was scheduled for follow-up visits every 3 months to monitor the progress of the condition.

At the 6-month follow-up visit, the patient reported complete resolution of the palpable cord-like structure, with the frequency of sexual activity or masturbation to once per week, and no further symptoms were noted. The patient's penile examination was unremarkable (Fig. 2), and the ultrasonographic findings had returned to normal.

3. Discussion

The majority of the existing studies focus on the clinical presentation, diagnostic challenges, and management strategies for this condition. However, there is a paucity of large-scale epidemiological studies, prospective clinical trials, and in-depth investigations into the underlying pathophysiology and risk factors. One of the significant challenges in the management of penile sclerosing lymphangitis is the limited understanding of its natural history and the lack of well-established treatment protocols. The condition can be chronic and progressive, leading to persistent symptoms, functional impairment, and a significant impact on the patient's quality of life [1, 4, 5]. Additionally, the rarity of the condition makes it difficult to conduct comprehensive research and develop evidence-based guidelines for diagnosis and management.

FIGURE 2. Physical examination at the 6-month follow-up visit. The patient reported that the palpable cord-like structure had completely disappeared, with no other symptoms present.

The exact etiology of penile sclerosing lymphangitis remains unclear. Vigorous or frequent sexual activity, as well as aggressive masturbation, has been proposed as a potential contributing factor due to the repetitive mechanical stress on the penile lymphatic vessels [2, 4, 5]. It is important to emphasize that such activity patterns represent potential mechanical triggers rather than pathological sexual behavior. In the absence of distress, functional impairment, or loss of control over sexual behavior, increased sexual activity frequency falls within the spectrum of normal human sexual variation and should not be pathologized. The mechanism is analogous to repetitive strain injuries in other anatomical sites, where normal activities performed with increased frequency or intensity can lead to inflammatory changes.

The diagnosis of penile sclerosing lymphangitis is primarily based on the clinical presentation of a palpable, cord-like structure along the penile shaft, which is often mistaken for other conditions, such as Peyronie's disease, sexually transmitted infections, penile thrombophlebitis, and particularly penile Mondor's disease [4, 5]. Penile Mondor's disease is a rare, benign, self-limiting condition characterized by thrombosis of the superficial dorsal vein of the penis. Unlike penile sclerosing lymphangitis, Mondor's disease typically presents with acute onset of pain, tenderness, and a cord-like induration along the dorsal shaft of the penis, often accompanied by

erythema and swelling. The condition frequently follows intense physical activity, prolonged erections, or minor trauma. Patients commonly report significant discomfort during erections and sexual activity [6]. Histologically, the lesion is characterized by thickening of the venous vessel wall with thrombus formation, Cluster of Differentiation (CD) 31/CD34 positivity, and no involvement of the lymphatic system [7]. The conditions of penile sclerosing lymphangitis and Mondor's disease of the penis may be related to vigorous sexual activity, frequent masturbation, or local trauma. When encountering a cord-like mass on the penis, multiple possibilities should be considered to avoid misdiagnosis or over-treatment [8].

Color Doppler ultrasonography is the preferred examination method [9]. Mondor's disease is a form of thrombophlebitis of the penile superficial veins, consistent with the thrombosis mechanism described by Virchow's triad (stasis of blood flow, vascular injury, and hypercoagulability). On color Doppler ultrasound, the superficial dorsal vein appears incompressible, with no blood flow signals within the lumen; the cavernous artery exhibits low-velocity, high-resistance flow (a characteristic feature of penile Mondor's disease) [7, 10]. In contrast, in sclerosing lymphangitis, ultrasound typically reveals thickened, echogenic lymphatic vessels, with no evidence of venous thrombosis or abnormal blood flow [6].

The prognosis of penile sclerosing lymphangitis is generally favorable, with the condition often resolving spontaneously or with conservative management. In the present case, the patient experienced complete resolution of symptoms within 6 months. Factors that may influence the prognosis include the severity of the initial presentation, the duration of symptoms, and the patient's adherence to the recommended lifestyle modifications [2, 11]. This case provides specific prognostic benchmarks, demonstrating that reduction of sexual activity to once weekly can result in complete resolution within 6 months, which may guide clinical counseling and patient expectations.

As the exact etiology of penile sclerosing lymphangitis is not fully understood, specific prevention strategies are limited. However, promoting awareness among healthcare providers and educating patients on the potential risk factors, such as excessive sexual activity or aggressive masturbation, may help facilitate earlier recognition and appropriate management of this condition [12]. In rare cases where patients present with sexual behavior that causes significant distress, relationship problems, or functional impairment, or when there is evidence of compulsive sexual behavior despite attempts to reduce frequency, appropriate psychological or psychiatric evaluation and support may be considered as part of comprehensive patient care [13]. However, such evaluation is not routinely indicated for penile sclerosing lymphangitis itself.

4. Conclusions

This case demonstrates that penile sclerosing lymphangitis can achieve complete spontaneous resolution through conservative management with specific activity modifications. The documented weekly activity frequency and no more than 6-month resolution timeframe provide important prognostic benchmarks for clinical practice. The rarity of penile sclerosing lymphangitis and limited research underscore the need for increased clinical awareness and systematic investigation to better understand its epidemiology, pathogenesis, and optimal management strategies. Given the significant underreporting and limited epidemiological data currently available, future efforts should focus on establishing systematic case registries, promoting multi-center collaboration to accumulate cases, and conducting prospective studies to better characterize the natural history, risk factors, and standardized management protocols for penile sclerosing lymphangitis. A multidisciplinary approach involving urologists, dermatologists, and radiologists is essential for advancing knowledge and improving patient care for this uncommon condition.

AVAILABILITY OF DATA AND MATERIALS

The data supporting the findings of this case report are not publicly available due to the inclusion of patient-specific clinical details. However, de-identified clinical data and imaging findings may be made available from the corresponding author upon reasonable request and with appropriate ethical approvals.

AUTHOR CONTRIBUTIONS

RQ, CYZ—Collecting data; Writing-original draft. LY, RQ—Writing–review and editing; Supervision. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study protocol was reviewed, and the need for approval was waived by Medical Ethics Committee of West China Fourth Hospital of Sichuan university. The patient information has been deidentified, and written informed consent was obtained for treatment and publication of this article and accompanying images.

ACKNOWLEDGMENT

Not applicable.

FUNDING

This research received no external funding.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

[1] Hutchins P, Dunlop EMC, Rodin P. Benign transient lymphangiectasis (sclerosing lymphangitis) of the penis. The British Journal of Venereal Diseases. 1977; 53: 379–385.

[2] Rosen T, Hwong H. Sclerosing lymphangitis of the penis. Journal of the American Academy of Dermatology. 2003; 49: 916–918.

[3] Alrubaiaan MT, Alotaibi M, Alekrish KA. Non-venereal sclerosing

lymphangitis of the penis in a 35-year-old Saudi male: a case report. Cureus. 2022; 14: e31087.
[4] Karray M, Litaiem N, Jones M, Zeglaoui F. Sclerosing lymphangitis of the penis associated with marked penile oedema and skin erosions. BMJ Case Reports. 2017; 2017: bcr2017221414.
[5] Tamraz H, Kibbi AG, Abbas O. Firm cord-like band over the penile shaft. International Journal of Dermatology. 2012; 51: 29–30.
[6] Öztürk H. Penile Mondor's disease. Basic and Clinical Andrology. 2014; 24: 5.
[7] Kumar B, Narang T, Radotra BD, Gupta S. Mondor's disease of penis: a forgotten disease. Sexually Transmitted Infections. 2005; 81: 480–482.
[8] Selvaraj R, Sivakumar A, Saravanan K. Penile Mondor's disease co-occurring with sclerosing lymphangitis: a double whammy. Indian Journal of Sexually Transmitted Diseases and AIDS. 2024; 45: 91–92.
[9] Foresti M, Parmiggiani A. Penile Mondor's disease: imaging in two cases. Radiology Case Reports. 2020; 14: 24–30.
[10] Amano M, Shimizu T. Mondor's disease: a review of the literature. Internal Medicine. 2018; 57: 2607–2612.
[11] Rodríguez Collar TL. Lymphangitis sclerosing of the penis: case presentation. Revista Habanera de Ciencias Médicas. 2014; 13: 701–707. (In Spanish)
[12] Babu AK, Krishnan P, Andezuth DD. Sclerosing lymphangitis of the penis—literature review and report of 2 cases. Dermatology Online Journal. 2014; 20: 13030/qt7gq9h1v9.
[13] Briken P, Bőthe B, Carvalho J, Coleman E, Giraldi A, Kraus SW, *et al*. Assessment and treatment of compulsive sexual behavior disorder: a sexual medicine perspective. Sexual Medicine Reviews. 2024; 12: 355–370.

How to cite this article: Rui Qu, Congyi Zhu, Luo Yang. Spontaneous resolution of penile sclerosing lymphangitis with conservative management: a case report and literature review. Journal of Men's Health. 2026; 22(3): 57-60. doi: 10.22514/jomh.2026.027.