

# Pelvic Physical Therapy for Vasectomy

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Vasectomy is a common method of birth control opted by families worldwide. In the US alone, 500,000 vasectomy procedures are performed every year (1). According to AUA, 1-2% of vasectomy surgeries end with chronic pelvic pain that can interfere with the quality of life and require medical attention (2). However, a recent meta-analysis shows a higher incidence of pain after vasectomy, at 15% (3). The pelvic pain post vasectomies can be described using different terms, including testialgia, chronic orchialgia, chronic scrotal pain, post-vasectomy orchialgia, congestive epididymitis, and chronic testicular pain. However, it is generally referred to as post-vasectomy pain syndrome (PVPS) (4).

The pathophysiology of PVPS is unclear. Some of the possible causes of pain are proposed in the research are (5)-

1. Direct damage to spermatic cord structures
2. Compression of nerves in the spermatic cord due to inflammation
3. Backpressure at the proximal stump of the vas deferens may cause sperm granulomas or epididymal blowout from epididymal congestion
4. Immunological component due to the formation of anti-sperm antibodies
5. Perineural fibrosis

## Medical Management

Generally, the first line of treatment for PVPS is pharmacotherapy and noninvasive modalities. NSAIDs, narcotic analgesics, antibiotics, neuroleptic drugs are commonly tried first. Spermatic cord blocks or local intralesional steroids injection can provide some pain relief (7).

Failed pharmacotherapy and noninvasive modalities trigger surgical intervention. Surgical options include excision of sperm granuloma, micro denervation of the spermatic cord, epididymectomy, vasovasostomy, and, in severe cases, orchiectomy (5).

## Physical therapy for PVPS

Unfortunately, pelvic health physical therapy (PT) is not a part of the standard treatment protocol for PVPS. Research suggesting physical therapy for PVPS management is limited. If recommended, it is suggested with poor confidence due to the lack of clinical trials supporting effectiveness (5, 8). On the contrary, the clinical experience of the physical therapists treating PVPS has a different outcome. It is challenging to propose a number, but pelvic PT's success rate is high when treated within months of the pain onset and with specific treatment techniques geared towards the pain source.

## How does pelvic PT treatment works?

1. Fascia: The Surgery location of vasectomy is highly sensitive. Nerves, artery, and veins accompany the Vas deferens as it travels to the prostate gland. The process of surgery, inflammation, lymph stagnation, pain, and scar tissue can limit the mobility of connective tissue around the pelvic area. Restricted mobility of nerve and blood vessels can lead to PVPS. It is essential to restore fascia mobility over the course of vas

deferens to ensure the surrounding structures' normal physiological function. Pelvic PT treatment focusing on fascia release could be extremely beneficial.

2. Nerve: Scrotal and penial pain is a common complaint post Vasectomy. It is crucial to understand the nerve connection to scrotal pain. The genital branch of the genitofemoral nerve and ilioinguinal nerve travels through the inguinal canal with the spermatic cord. Both nerve supplies to different parts of the scrotum and surrounding areas. Post-surgical irritation, compression, or restricted mobility (referred to as "gliding" or "flossing") of the nerve can be a contributing factor to PVPS. Another nerve to consider with pelvic pain is the pudendal nerve. Generally, this nerve is not involved in the surgery but can have an indirect effect on the symptoms. Restoring nerve mobility can tremendously help with PVPS.
3. Pelvic floor: Addressing pelvic floor mobility and function has a significant impact on PVPS.
4. Joint position and function: Sacroiliac (SI) joint, Pubic Joint, Hip, and lower back alignment has a direct effect on pelvic function. It is also essential to consider the influence of the other joints and body parts on the pelvis. After all, the body works as one unit.
5. Posture: Optimum functioning of a body is directly related to optimum alignment.
6. Organ alignment and function: Visceral mobilization is not a common technique used by pelvic PTs. It has yet to claim its fame in the pelvic PT world. However, it is hard to argue the effect of organ position on pelvic function since they all share the same space.
7. Breathing: Pelvis is not known as a breathing-related area; however, it has a considerable impact on breathing and vice versa. Restoring breathing helps with posture, alignment, and issue integrity and calms the sympathetic system to reduce stress.
8. Mindfulness: Pain and functional limitations have a significant effect on the mind. The path of recovery while dealing with pain can trigger several emotions such as fear, anger, frustration, depression, and more. Understanding the mental process and using mindfulness techniques to help overcome the emotional roller coaster can provide the most important tool to achieve success.

Pelvic health physical therapy needs to be the first line of care for patients with PVPS. Unfortunately, many patients don't care they need. Educating doctors, professionals, and the general population is an integral step in bringing pelvic care to the patients.

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