VOLUME - 12, ISSUE - 11, NOVEMBER - 2023 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Anaesthesiology

MANAGING THE PAIN OF DUMBBELL INDUCED PENILE INJURY: CASE REPORT

Dr. Lakshmi Vas	Director, Ashirvad Institute For Pain Management and Research, Mumbai.
Dr. Ankush Wasnik*	Consultant, Ashirvad Institute For Pain Management and Research, Mumbai *Corresponding Author
Dr. Jhanvi Vora-Hemani	Consultant, Ashirvad Institute For Pain Management and Research, Mumbai
Dr. Priyanka Deshmukh	Consultant, Ashirvad Institute For Pain Management and Research, Mumbai

ABSTRACT Penis pain, or penile pain, is a condition that involves discomfort and pain in the penis. The severity of penis pain can range from mild to severe and may come and go over time. Various factors, including physical injury, infection, skin irritation, allergies, and mental health issues, can cause it. Erectile dysfunction, or difficulty achieving and maintaining an erection, Painful erection, or penile pain during or after an erection, is also very common. Pain in urination, Painful sex and numbness are other symptoms associated with this condition. Burning sensations may also develop if the pain persists for a long time. We present a case of 26 year old man with penile injury with dumbbells while working out in gym. He had burning all over the penile region, unable to touch it and couldn't wear tight pants. Pain severity was 7-8/10 along with numbness in the perineal region. With all this patient was not able to ejaculate or masturbate and the efficiency of erection also has gone down to almost 50%. We treated him starting with dorsal penile and B/L pudendal nerve block, Injection triamcinolone 10 mg and 20 mg respectively. This gave him 40-50% relief, we then followed with ultrasound guided dry needling (USGDN) of the perineal muscles targeting bulbospongiosus, ischiocavernosus and perineal body. After 7-8 sessions patient had 80-90% relief with no numbness and burning, able to perform all his routine activities. With 3 months follow up, patient was completely recovered with almost pain free.

KEYWORDS : Penile Injury, Gym Injury, Pudendal Nerve Block, Dorsal Penile Nerve Block, Ultrasound Guided Dry Needling.

INTRODUCTION:

Penis pain, or penile pain, is a condition that involves discomfort and pain in the penis. The severity of penis pain can range from mild to severe and may come and go over time. Various factors, including physical injury, infection, skin irritation, allergies, and mental health issues, can cause it. Treatment depends on the underlying cause but may include medications, lifestyle changes such as wearing loose-fitting clothing or avoiding certain activities that trigger the pain, avoiding sexual contact until the issue resolves itself, using an anti-inflammatory cream or ointment for localised symptoms, undergoing physical therapy for more severe cases of chronic pain syndrome (CPPS), or seeing a doctor for further evaluation if other treatments aren't successful. Penis pain can present itself in a variety of ways. Erectile dysfunction, or difficulty achieving and maintaining an erection, is one of the most common symptoms. Painful erection, or penile pain during or after an erection, is also very common. Pain in urination, known as painful voiding, is also a symptom that may be experienced with penis pain. Hard flaccid involves an abnormally rigid penis even when not erect.

Painful sex and numbness are other symptoms associated with this condition. Burning sensations may also develop if the pain persists for a long time. It's also important to note that various underlying medical conditions, such as an infection or urinary tract disorder, can cause penis pain

Case:

26 year old man came with c/o burning all over the penile region mostly on the ventrolateral aspect and both the sides of the penis. Pain appeared after full bladder and while urinating.

Patient was unable to touch his penis and couldn't wear tight pants. Pain was aggravating while working for long hours and it involved the junction of the penis and scrotum, pricking in nature.

On more severe scenario like while driving two-wheeler for an hour or more, numbness appeared in the perineal region. Pain severity was 7-8/10. With all this patient was not able to ejaculate or masturbate and the efficiency of erection also has gone down to almost 50%, as per explained by the patient.

Patient had h/o direct dumbbell injury over his penis while doing some gym exercise 7-8 months back. No history of bleeding while urination at that time. Swelling and tenderness was present over the penis. It had been associated with burning micturition and lack of erection. Over the time symptoms were slowly settled down but not completely resolved.

Investigations like CBC was normal. No MRI, CT SCAN was done. Vit B12-D3 were deranged and over the time got corrected.

Management:

We started with penile trigger injection along with B/L pudendal nerve.

For penile trigger, it was done under USG guided, B/L dorsal penile nerve were blocked with 2% Lignocaine and Inj Triamcinolone 10 mg. Pudendal nerve block was given for to address numbness in the perineal region. Here also we gave 2% Lignocaine and Inj Triamcinolone 10 mg on each side.

Patient has been called after 7 days for follow up visit. On first visit patient had 40-50% pain relief with no episodes of numbness over perineal region. Patient was able to touch his penis which was impossible before. He was able to wear tight pants and work for long duration. Burning pain and pricking pain over the base of the scrotum was still present though it was reduced to 20-30% after trigger injection. Post trigger injection we have started doing USG dry needling of the lower abdomen and perineal region. We targeted the perineal body,

and perineal muscles specially bulbospongiosus and ischiocavernosus muscles. We did 4-5 sessions over the time span of one month with each sessions a week apart. Post all these sessions patient have 70-80% relief in all of his pain region specially the pricking pain at the base of the scrotum, penile region pain, burning has come down and the holding capacity and duration of the bladder has been improved. Efficiency of erection has been improved to pre-injury level and patient have tried doing masturbation also.

He drove a two-wheeler for almost everyday for 8-10 days spanning 50-60kms per day without getting any numbness. Also, he started wearing tight pants for a whole day without getting any pain over penile region. Few more sessions gave him nearabout 90-95% pain relief.

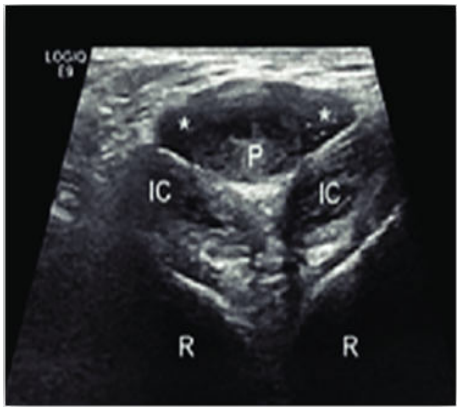

Figure A

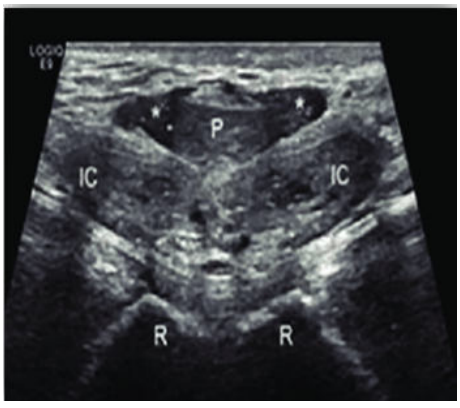

Figure B

Sonographic images from figure A and B in the anterior perineal region (one-quarter the distance from the base of the scrotum to the anus). The two bulbospongiosus muscles (asterisks) are seen laterally to the bulb of the penis (P) in the near field. The ischiocavernosus muscles (IC) lie deep to these structures but superficial to the inferior pubic rami (R) near the pubic symphysis

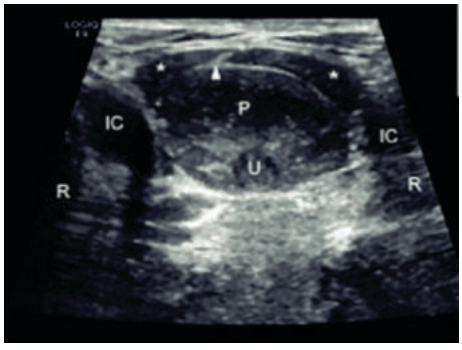

Figure C

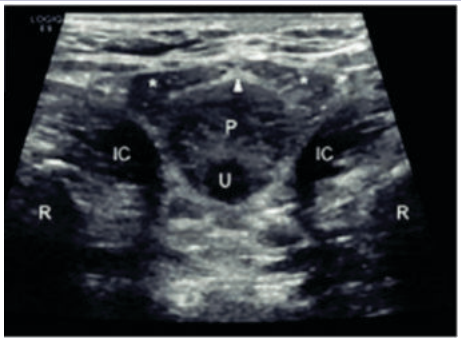

Figure D

Sonographic images from subjects C and D in the mid-perineal region (half the distance from the base of the scrotum to the anus). The two bulbospongiosus muscles (asterisk) wrap superficially around the bulb of the penis (P) and connect to the midline raphe/central tendon (arrowhead). The ischiocavernosus muscles (IC) follow the pubic arch, sitting next to the inferior pubic rami (R) visualized at the deep lateral borders of the virtual convex image. The urethra (U) can be visualized deep in the bulb of the penis

DISCUSSION:

Penile injuries can be due to several factors. Most occur in industrial, automobile accidents, or as a result of attempts at self-mutilation. The incidence of penile injuries is under-reported because many patients do not seek medical attention due to ethical and psychological reasons.

We assumed that injury to penis due to dumbbell must have injured the dorsal penile nerves which is responsible for the burning and pain on touch to the penis. By targeting dorsal penile nerve we have addressed the neuropathic component and with USG dry needling we cured the myopathic i.e., muscular component, as every neuropathic injury not only involves nerves but muscles also. So, we consider neuropathic syndrome as a neuro-myopathic injury. And by addressing both of these, patient got significant pain relief which proves our ideology. we targeted pudendal nerve to solve the numbness over perineal region. Followed by few sessions of USGDN targeting bulbospongiosus, ischiocavernosus, perineal body as these muscles are involved in both erection and ejaculation. By targeting them, we were able to improve his pain severity, numbness and also the erectile function as well. Overall, it helps patient to improve mental, physical condition and by doing so ultimately improves the quality of life as well.

CONCLUSION:

We would like to reckon that applying the concept of neuro-myopathy instead of only neuropathy not only helps to cure the pain due to rare conditions like penile injury but also improves the mental and physical well being of the patient and Ultrasound guided dry needling proves to be safer, simpler armamentarium against chronic pain conditions.

REFERENCES:

1) Krishna Reddy, S. V., Shaik, A. B., & Sreenivas, K. (2014). Penile injuries: A 10-year experience. *Canadian Urological Association journal = Journal de l'Association des urologues du Canada*, *8*(9-10), E626–E631. https://doi. org/10.5489/cuaj.1821
2) Amkele S, Lee G, Stock J, et al. 20-year experience with iatrogenic penile injuries. *J Urol*. 2003;170:1691–4. doi: 10.1097/01.ju.0000084147.28987.7f.
3) Perovic SV, Djinovic RP, Bumbasirevic MZ, et al. Severe penile injuries: A problem of severity and reconstruction. *BJU Int*. 2009;104:676–87.
4) Ehrish WS. Two unusual penile injuries. *J Urol*. 1929;21:239–41.
5) Krishna Reddy SV. Unusual penetrating injury to the male genitalia. *Int Neurourol J*. 2013;17:38–40. doi: 10.5213/inj.2013.17.1.38.