Case Report

A Tele Rehabilitation Approach for the Treatment of Dyspareunia: Case Report

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Abstract

Painful sexual intercourse, also called as Dyspareunia, may be due to a medical or psychological causes. Women with painful sexual intercourse may have pain in the Vagina, Clitoris or Labia. The pain would primarily be on the External surfaces or deeper in the pelvis. Medically, Dyspareunia is a pelvic floor dysfunction and affects up to 53% of adult women and remains underdiagnosed. A multidisciplinary approach is needed for a complete rehabilitation of the dysfunction. As a part of the rehabilitation team, A Pelvic floor therapist also plays a crucial role in treating the Tone and the Strength of the Pelvic floor muscles.

But during the COVID-19 pandemic and with the social distancing norms, the pelvic floor therapist faced a challenge in treating this concern. The current case report describes the Telerehabilitation approach and progressive intervention administered by the authors for Hypertonic pelvic floor dysfunction, to improve the quality of life and the strength of the pelvic floor of the women's during the lockdown or when reaching the therapist gets difficult.

Keywords: *hypertonic pelvic floor dysfunction, Telerehabilitation, Dyspareunia, non-relaxing pelvic floor muscles.*

Introduction

Dyspareunia in women is a recurrent or persistent pain with sexual activity that can cause marked distress or interpersonal conflict [1]. It can lead to or be associated with other female sexual dysfunction disorder, which includes decreased libido, decreased arousal and orgasm [1]. Hypertonic pelvic floor muscles, is a dysfunction in which the pelvic floor gets tensed and unable to relax, and is considered as one of the causes for this condition. Women with such a dysfunction do complain of pelvic pain, painful sex and constipation[2]. However, the symptoms of non-relaxing pelvic floor vary and often attributes to as pelvic floor myalgia, levator ani syndrome and perineum syndrome[3]. Pelvic floor neuromuscular reeducation exercises along with certain devices is the mainstream treatment for non-relaxing pelvic floor muscles however during the COVID- 19 pandemic lockdown, with the threatening

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virus and the spread, it was difficult for the pelvic floor therapist to treat such a concern over virtual online platform. Hence the current case report discusses a Tele rehab protocol used by the therapist to improve the quality of life and the pelvic floor strength of the client with dyspareunia.

Case Report

A 27 years adult female, unmarried and sexually active, Teacher by profession connected for a Tele rehab consultation of an advanced physiotherapy center at Mumbai, Maharashtra in March 2021 during the Lockdown, having complains of painful sex during coital activities since a year. A consent form clarifying the norms and the benefits of the therapy was shared over an email prior to the consultation. On the scheduled day and time, the therapist connected to the client over a virtual platform.

After discussing the Sexual history on Desire of having sex, arousal level, Lubrication, Orgasm, clients satisfaction after the intercourse and Coital pain, the client was taught Pelvic floor muscle strength testing method on a Pelvic model, following which she was advised to asses her own Pelvic floor strength and report it on a modified oxford scale. As a Subjective assessment, the client was told to administer a questionnaire, The Female Sexual Distress scale-Revised [FSDS- R] to assess the Quality of life. Both the outcomes, were used as a Baseline score for the therapy. Based on the clinical history and the outcome measure, the client was diagnosed with Vaginismus associated with hypertonic Pelvic floor muscles and was assigned for 20 Tele rehab sessions thrice a week, 45 minutes at a convenient time of the day.

Intervention:

1. Pelvic floor Relaxation: The session begun with Breathing and Pelvic floor relaxation coordinated for 5 minutes. With each deep inhale, the client was asked to relax the vaginal opening completely and while she exhale, she was instructed to gradually close the vaginal opening which synched her breathing with the pelvic floor movements. She was instructed not to engage the accessory muscles- abdominals, gluteal and adductors.

2. Invasive technique: Once the client was aware of the Pelvic floor muscles in isolation, she was advised to gently insert her clean sanitized index finger in the vaginal opening while she continued with the Coordinated breathing pattern. The synchronized contraction and relaxation of the Pelvic floor muscles with breathing will guide the index finger slowly in the vagina without pain. Once the fingers could be inserted almost to 1/3rd, the client was taught to palpate for painful trigger points on the vaginal wall in the clockwise pattern.

3. Trigger point release: On locating the trigger points, she was advised to apply tolerable pressure over each points and maintain it for 30 sec coordinating it with the breathing. This was repeated 3-4 times. The above 2 techniques were first demonstrated on a pelvic model by the therapist.

4. Icing: Client was advised to keep a water filled hand gloves in the refrigerator and insert the iced gloved finger in the vagina post the trigger points release.

5. Dilator: As a progression, once the trigger points were released, the dilator was used in all the functional position. The dilator was inserted in the lying down position first and gradually progressed to side lying and quadruped position. The client was instructed to follow the same technique of breathing and pelvic floor coordination while inserting. Once the dilator could insert smoothly, the client was advised to move it in clockwise, anticlockwise and thrusting movement for 15 -20 min with rest of 2-3 minutes.

6. Perineal massage: As a home exercises program, the client was advised to massage the vaginal opening while she lied down on her back with the knees bent, rested on the sides on the pillow. With her clean gelled index finger, she had to give deep U slinged strokes at the vaginal opening.

7. Home exercise program (HEP): A regular HEP for strengthening the pelvic floor was given to the client which was assessed and monitored by the treating therapist on the mobile application.

The outcome measure and the Self testing was administered on the 10th session and at the end of 20th session.

Result: On the initial assessment, the client complained of pain while she inserted her index finger 1/3rd in the vaginal opening. Also, there were 3 trigger points noted at the 4 clock, 7 clock and 9 clock pattern. The self-reported strength of the muscles was 3/5 on Modified oxford scale. The FSDS- R score was reported to be 39/52. By the 10th session, the client experienced a satisfactory sexual activity and could feel a less painful penetration. However, thrusting would aggravate the pain. Two trigger points were released (7 clock and 4 clock) and the outcome measure also showed an improvement. With the progression in the exercise regimen, by the 20th session, the client could insert her two fingers, pain-free in the vaginal orifice with no trigger points. The strength of the muscles is 4/5 on modified oxford scale. A significant improvement is seen on the questionnaire score (Table 1).

Table 1: Outcome measures

Sr. No	Outcome measure	Day 0	Session 10th	Session 20th
1.	Trigger points	Present at 4 clock, 7 clock and 9 clock	Present at 9 clock	Nil
2.	Modified Oxford Scale	3/5	3/5	4/5
3.	FSDS- R score	39/ 52	11/52	3/52

Discussion

The Tele rehab approach administered for rehabilitating the Hypertonic pelvic floor muscles has shown a significant improvement in the tone, the strength of the pelvic floor and the quality of life of the client suffering from Dyspareunia due to vaginismus. This supports the study done by Vermandel et al which reports increased knowledge of pelvic floor has a positive association with reduced pelvic floor dysfunction [4]. The current protocol begins with understanding the pelvic floor muscles and its basic biomechanics with diaphragm while breathing. This helped in complete relaxation of the pelvic floor while the client focused on breathing [5]. An awareness of pelvic floor and the recruiting of the accessory muscles are a crucial step in the rehabilitation of the Hypertonic muscle which was well explained

to the client on the 1st session. Timely Revising the coordination of breathing pattern with pelvic floor enhanced the results. The self-invasive technique gave the client the confidence to penetrate which reduced the penetration fear and she started practicing the same while involved in the sexual activities which reduced her discomfort and pain which supports the case report of Eivazi et al on two cases of Vaginismus treated with self finger approach. [6]. The ischemic compression technique applied to the trigger points helped to break the points, making the penetration and thrusting pain free and relaxing the pelvic floor. Icing post the trigger point release helped to reduce the pain and also increase the blood supply to the muscles helping to wash the toxic and also promote healing. Asian M et al in his study on treatment of Vaginismus, with Dilator training proved statically more significant than the finger training. Hence Dilators used for the therapy in the current report acted like a dummy penis and boosted the clients confidence, decreased the fear of penetration[7]. Practicing the dilators in different positions also added to the result.

Perineal massage functioned as a stretching to the vaginal opening, maintained the flexibility and helped relaxed the pelvic floor. It was advised to relax the Vaginal opening by the massage during the sexual activities as a part of the foreplay. This added to increased relaxation and also to lubricate the vaginal canal well. The compliance and effectiveness to the protocol was monitored by continuing the HEP on the other days of the week when the client didn't connect. This helped maintain the achieved outcome and enhance the results. Most important reason for the compliance to the whole program, was exercising from home environment, which added to the mental satisfaction of the client, reducing the embarrassment and the COVID 19 fear.

Conclusion

The Tele rehab approach administered for treating dyspareunia is effective in reducing the symptoms associated with vaginismus, mainly dyspareunia, the Strength and the Quality of sexual health of the women.

Conflict of Interest: Nil

Source of Funding: Funded by the organization.

Consent Form: A written consent form was taken from the client over a mail before participation.

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