ISSN Print: 2664-8393
ISSN Online: 2664-8407
IJGS 2025; 7(2): 26-27
www.gynaecologyjournal.net
Received: 05-10-2025
Accepted: 19-10-2025

Dr. Israa Hashim Abdalkareem
Department of Obstetrics & Gynecology, College of Medicine, Tikrit University, Salaheddin, Iraq

Corresponding Author:
Dr. Israa Hashim Abdalkareem
Department of Obstetrics & Gynecology, College of Medicine, Tikrit University, Salaheddin, Iraq

Radiofrequency therapy for post-partum vaginal Laxity in Tikrit City: A cross-sectional study

Israa Hashim Abdalkareem

DOI: https://www.doi.org/10.33545/26648393.2025.v7.i2a.49

Abstract
post-partum vaginal laxity is a common concern affecting women quality of life and well-being. Of multiple treatment options, non-invasive radiofrequency therapy was able to restore vaginal tightness through initiation of collagen and elastin production at vaginal tissue. Method: four sessions of radiofrequency therapy applied on 37 women suffering from post-partum vaginal laxity, and sexual function changes documented using female sexual function index (FSFI). Results: significant changes in FSFI before and after RF therapy was documented. Conclusion: Radiofrequency therapy represents a promising non-surgical intervention with a favorable safety profile for post-vaginal delivery vaginal laxity.

Keywords: Vaginal laxity, radiofrequency, FSFI

Introduction
Post-partum vaginal laxity (PPVL), often taking place after normal vaginal delivery is considered one of the most common stressors affecting women well-being. It results from stretching of vaginal canal and weakness of pelvic floor muscles, resulting in reduced sexual satisfaction, urinary incontinence, and diminished quality of life [1, 2]. Multiple treatment options of this condition exist. Among the non-invasive options, radiofrequency therapy (RF) acquired attention due to its efficiency in restoring vaginal elasticity and tightness by thermal stimulation of collagen and elastin fibers production in vaginal tissue [3-5].
RF devices works by emitting electromagnetic waves into the collagen rich areas in vaginal canal, stimulating fibroblasts to produce new collagen and elastin over time helping in restoring vaginal tissue tightness and elasticity [6-9]. Multiple studies shows that RF therapy is well tolerated, non painful, generally safe and showing few or no side effects [8-10].
In this study we evaluate role of RF therapy in restoring sexual life of women suffering from PPVL.

Methodology
A cross-sectional study including 37 women having PPVL with no history of other interventions, started four sessions of RF therapy at 30-50 days postdelivery, with four weeks gap between each session. FSFI questionnaire used to trace changes before and after treatment.

Results
The average age and parity of participants was 34.9 years ± 8.04 years, and 3.9 ± 1.5 respectively, as shown in Table-1 below:

Table 1: Sociodemographic features of study participants

Criteria	Mean	Standard Deviation	Range
Age	34.9	8.04	20-48
Parity	3.9	1.5	1-7

Tracing changes in means of FSFI documented before and after RF therapy shows significant differences with P. value of 0.000, as shown in Table-2 below:

Table 2: Results of one-way ANOVA for average FSFI reported before and after RF treatment sessions.

Source	Degree of freedom	Sum of squares	Mean square	F-stat	P. Value
Between Groups	3	4586.92	1528.97	227.06	0.000*
Within Groups	144	969.54	6.73		
Total	147	5556.46			

*Significance level ≤ 0.05

Similarly, tracing changes in means of FSFI domains before and after RF treatment were significant with P. value of 0.000. This shown in Table-3 below:

Table 2: Changes in means of FSFI domians before and after RF treatment

Source	Degree of freedom	Sum of squares	Mean square	F-stat	P. Value
Desire	3	169.9862	56.6621	48.7084	0.000*
Arousal	3	254.8217	84.9406	154.1439	0.000*
Lubrication	3	20.7301	6.91	13.104	0.000*
Orgasm	3	210.1375	70.0458	87.914	0.000*
Satisfaction	3	151.5051	50.5017	100.3242	0.000*
Pain	3	82.673	27.5577	41.6323	0.000*

*Significance level ≤ 0.05

Tracing changes of ≤ 26.5 FSFI scores before and after RF therapy reveals that 89% of participants shows score > 26.5 score. This shown in Figure 1 below:

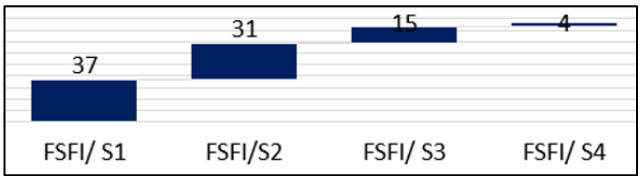

Fig 1: Changes in less than or equal 26.5 FSFI score among participants before and after RF therapy

Discussion

Current study shows significant improvement in FSFI scores and its six domains before and after RF therapy. Similar findings were reported at 2023 by FU *et al* [11], who find that RF therapy significantly improves FSFI scores and its domains. Similarly, Wattanakrai P [12] at 2022 reported significant increase in FSFI scores after RF therapy. Also, at 2021, Kolodchenko Y [13] also reported significant improvement in FSFI scores after RF treatment.

Current study shows that 89% of participants gets FSFI score above 26.55 at the end of RF therapy. It is almost similar to what is reported by Kolodchenko Y at 2021[13], who find that 97% of participants gets improvement in FSFI score after RF therapy. Unlike what I find in my study, FU *et al*. [13] at 2023 find that only 29.41% of subjects (n=30/102) experienced improvement from baseline in their combined measure of sexual functioning at 12 months with the total FSFI score≥26.55. Also, in Wattanakrai P [12] study at 2022, despite there is significant improvement of FSFI scores over baseline in this study, but all participants show FSFI total score≤26.5 after RF therapy.

Conclusion

Radiofrequency therapy represents a promising non-surgical intervention with a favorable safety profile for PPVL and sexual dysfunction.

References

1. Rogers RG, *et al*. A new measure of sexual function in women with pelvic floor disorders (PFD): the Pelvic Organ Prolapse/Incontinence Sexual Questionnaire, IUGA-Revised (PISQ-IR). Int Urogynecol J. 2013 Jul;24(7):1091-1103. DOI: 10.1007/s00192-012-2020-8. Epub 2013 Apr 30. PMID: 23632798.
2. Sekiguchi Y, Utsugisawa H, Azekosi Y, *et al*. Effectiveness of radiofrequency treatment for vaginal laxity: A prospective study. Int Urogynecol J. 2019;30(5):879-885.
3. Abdelaziz A, Blusewicz TA, Coley KP, Karram M. Safety, tolerability and short-term efficacy of transvaginal fractional bipolar radiofrequency therapy for symptoms of stress and/or mixed incontinence in conjunction with genitourinary syndrome of menopause. Neurourol Urodyn. 2023 Apr;42(4):807-813. DOI: 10.1002/nau.25170. Epub 2023 Mar 4. PMID: 36870045.
4. Alshiek *et al*. Vaginal energy-based devices. Female Pelvic Med Reconstr Surg. 2020;26(4):287-298.
5. Hoss E, Kollipara R, Fabi S. Noninvasive vaginal rejuvenation: Radiofrequency devices. Skinmed. 2019;17(6):396-398. PMID: 31904331.
6. Karcher C, Sadick N. Vaginal rejuvenation using energy-based devices. Int J Womens Dermatol. 2016;2(3):85-88.
7. Millheiser LS, Pauls RN, Herbst SJ, Chen BH. Radiofrequency treatment of vaginal laxity after vaginal delivery: Nonsurgical vaginal tightening. J Sex Med. 2010;7(8):3088-3095.
8. Believe Aesthetics & Wellness. Understanding collagen stimulation: How radiofrequency technology restores skin elasticity. https://believeaesthetics.com.
9. The Beautyholic. How radiofrequency devices can boost collagen in the skin. Available from: https://thebeautyholic.com.
10. Wattanakrai P, Limpjaroenviriyakul N, Thongtan D, Wattanayingcharoenchai R, Manonai J. The efficacy and safety of a combined multipolar radiofrequency with pulsed electromagnetic field technology for the treatment of vaginal laxity: A double-blinded, randomized, sham-controlled trial. Lasers Med Sci. 2022 Apr;37(3):1829-1842.
11. Fu X, *et al*. The efficacy and safety of temperature controlled dual-mode radiofrequency in women with vaginal laxity. BMC Womens Health. 2023;23:121. https://doi.org/10.1186/s12905-023-02261-y.
12. Wattanakrai P, Limpjaroenviriyakul N, Thongtan D, Manonai J. The efficacy and safety of a combined multipolar radiofrequency with pulsed electromagnetic field technology for the treatment of vaginal laxity: A double blinded, randomized, sham controlled trial. Lasers Med Sci. 2022;37:1829-1842. https://doi.org/10.1007/s10103-021-03438-7.
13. Kolodchenko Y. Nonablative, noncoagulative multipolar radiofrequency and pulsed electromagnetic field treatment improves vaginal laxity and sexual function. Womens Health Rep. 2021;2(1). DOI: 10.1089/whr.2021.0020.