

# Evaluation of Sexual Function, Genital Self-Image and Therapeutic Satisfaction of Women Undergoing Shockwave Therapy Treatment for External Genitalia Laxity: a pilot study



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# Introduction

Tissue laxity of the external genitalia is an aesthetic dysfunction that commonly affects women and favors dissatisfaction with the appearance of the vulva. Dissatisfaction with one's own genitalia should be considered a health problem because it negatively influences interpersonal relationships, well-being, genital self-image, sexual function, and quality of life, in addition to favoring risky behavior to one's gynecological health, which may lead to underperformance of essential pelvic exams.[1]

In view of the negative impact that an aesthetic dysfunction can have on health, associated with the increased search by women for aesthetic treatments for the intimate region, there is a growing interest in the development of research that addresses therapeutic resources for these dysfunctions.

Shock wave therapy (SWT) is a technique that currently demonstrates results in improving body tissue laxity and it is believed that it can be also a beneficial treatment for tissue laxity in the genital region. SWT consists of applying highenergy acoustic waves to the tissue, which favors the induction of tissue self-regeneration processes in the extracellular matrix of the skin, improving appearance and turgidity.[2,3] However, to our knowledge, so far there are no studies proving its effectiveness in the genital region. In an innovative way, this research aims to describe the effect of SWT on the genital self-image and on sexual function and the therapeutic satisfaction of women with external genitalia laxity. Finally, 7 days after the last intervention, the participants were reassessed following the same initial assessment. In addition, they answered the following questions twice (before and after seeing the recorded photos at the assessment and reassessment): "Today, after treatment, how does your genitalia look?": much worse, worse, unchanged, better, much better; "What is your level of satisfaction with the treatment?": very dissatisfied, dissatisfied, unchanged, satisfied, very satisfied.

#### Results

The sample consisted of 10 women, among whom, 8 completed the treatment. They had a mean age of 47.75  $\pm$ 9.85 years. In the perception of genital self-image, pre-intervention FGSIS-7 scores of 18.62  $\pm$ 4.24 and post-intervention 19.25  $\pm$ 3.49 were obtained. For sexual function, results of the SQ-F pre-treatment of 66.75  $\pm$ 24.18 and post-treatment of 70.25  $\pm$ 24.48 were observed.

Regarding the perception of change in the appearance of the genitalia before seeing the recorded photo, 06 participants reported that it was better and 02 unchanged. After viewing the photos, 01 volunteer reported that it was much better, 05 reported that it was better and 02 that it was unchanged. One example is shown in Figure 1. Regarding satisfaction with the treatment, before viewing the photo, 07 volunteers reported that they were satisfied and 01 was very satisfied. After the seeing the photos, 02 reported being very satisfied and 06 satisfied.

### **Methods and Materials**

This is a pilot study, which evaluated women aged between 18 and 65 years with an aesthetic complaint of laxity of the external genitalia. Women who had dermatosis, infection or inflammation in the genital region, pregnancy, use of cosmetics in the genital region and oncological disease or previous history of cancer were excluded from the study. The study was carried out from September 2021 to February 2023.

Initially, in a private and individualized room, volunteers signed the Free and Informed Consent Form and answered a basic anamnesis. Then, they completed the self-administered instruments to assess genital self-image and sexual function. Subsequently, they were submitted to a probative physical examination, being necessary to visualize only the presence of a wrinkle and/or furrow in the skin tissue, associated with the maintenance of a deformation in the tissue after traction.

The Female Genital Self-Image Scale (FGSIS-7) is an instrument that assesses satisfaction and beliefs regarding one's own genital image. The scores can vary from 7 to 28 points, there is no cut-off point and higher values indicate a more satisfactory self-image. The Sex Quotient – Female Version (SQ-F) is an instrument composed of 10 questions. It is categorized according to the score: 82-100 as good to excellent, 62-80 as regular to good, 42-60 as unfavorable and 0-20 as null to bad.

The sample was submitted to a treatment protocol that consisted of 5 sessions, performed once a week, with the electromagnetic SWT device Thork (IBRAMED, Amparo, São Paulo, Brazil). The parameters used in the genital region were based on the studies on body regions, adapted according to the area.[3] A 34mm metallic tip covered by a silicone case and with disposable plastic film were used. The parameters used were: energy 75mJ, frequency 15Hz and 2500 shots. Application was made on each labia majora, in the craniocaudal direction, using a water-soluble gel for sliding.



**Figure 1** - Photo of the patient's genital region at the time of evaluation (left) and reassessment after treatment with SWT (right).

#### **Interpretation of Results**

According to our results, the aesthetic treatment for laxity of the female external genitalia, using the technique of SWT, it is not possible to infer about the improvement of the genital self-image of the women submitted to the intervention, taking into account that the differences in the scores of the FGSIS-7 was only one point. However, the results regarding sexual function indicated improvement according to the score of the evaluated instrument, after treatment. Although most of the evaluated participants remained in the category (regular to good), there was an increase in the final average of the result.

Although the SWT results regarding genital image and sexual function did not have a great impact, the participants reported a positive change in the appearance of the external genitalia and satisfaction with the treatment, before and after viewing the photographic record.

The literature addresses that self-knowledge of the genitalia and its diversities favors the improvement of genital selfimage and consequent sexual function.[1] In this way, it is believed that submitting women to aesthetic treatments helps in this process of relationship with the genitalia, which favors a satisfaction with the treatment. In our study, satisfaction with the treatment remained after viewing the photographic record, which suggests that SWT was beneficial for these women.

# Conclusions

SWT can be a beneficial therapeutic proposal for intimate aesthetics as it has a positive impact on women's perception with the image modification and satisfaction with the treatment, but it should be further studied for better conclusions of results through a randomized clinical trial.

# References

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