

CLINICAL STUDY OF PELVIC FLOOR MUSCLE INCREASING PROCEDURE USING WONDER® MT.

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I. Introduction.

The pelvic floor is a system of muscles and ligaments that close the floor of the abdomen, keeping the bladder, uterus, and rectum suspended against gravity.

The fibers of the pelvic floor are directed downward and outward, forming a "hammock" that collects the insides of the pelvis. Muscles intersect and surround 3 openings: urethra, vagina and anus, helping to control the sphincter.

Weakening of the pelvic floor causes one or more disorders, including urinary incontinence, lowering of the abdominal organs (known in medicine as prolapse), and sexual dysfunction.

Weakness of the pelvic floor muscles can be caused by various reasons, including personal predisposition, as some women have muscle and ligament weakness, situations that increase intra-abdominal pressure, such as obesity, some sports such as running or lifting weights, playing the wind instruments or chronic cough.

In addition to menopause, a period in which atrophy and hypotension of genital tissues is observed due to hormonal changes, pregnancy is a period in which these tissues weaken due to various factors, such as an increase in intra-abdominal weight, tissue hypermobility due to hormonal changes and tissue stretching when passing the baby during childbirth.

II. Recreational procedures and rehabilitation of pelvic floor.

The integrity of the pelvic floor plays a fundamental role in the maintenance of the internal organs of the small pelvis, in the mechanisms of abstinence and in sexual activity; pelvic floor dysfunction can lead to prolapse of the genitals, incontinence of urine, feces and gas, and sexual dysfunction.

Perineal rehabilitation is challenging because, unlike any other muscle in the body, the contraction of the perineal muscle is not visible to the eye, as it is an internal muscle that is more difficult to monitor than other muscles. However, it is very important for the health of women and their quality of life.

Among the most common causes of pelvic floor weakness are:

- Pregnancy
- Birth
- Menopause
- Surgery
- Inheritance
- Overly tight clothing.
- Obesity
- Constipation
- Smoking
- Chronic cough
- Professions with a degree of risk: singers, athletes, musicians who play wind instruments...

III. New methods of combined radiation of localized electromagnetic waves and selective electrical stimulation of high intensity.

The use of functional external stimulation techniques to restore the pelvic floor is aimed at stimulating passive contraction of the urethral sphincter and perineal muscles by means of an electric current applied to the wall of the vagina or anal canal.

The combined electrical and magnetic radiation produces a nerve stimulus that activates the sacral roots S1, S2, and S3. The transverse sphincter surrounding the urethra and pelvic floor is primarily innervated by these roots, so the main requirement will be the absence of denervation and the presence of an integral reflex arc.

Improper performance of muscle contraction exercises can lead to unwanted contractions of other muscles, such as abdominal or gluteal muscles, due to increased intra-abdominal pressure.

The goal of treatment with Wonder MT Technology is to achieve positive or active muscle strengthening by asking the woman to practice stable voluntary muscle contractions using gymnastics developed by WonderGym. This gymnastics strengthens the muscles involved, improving the strength, elasticity and resistance of the perineal muscles.

The recommended frequency of Wonder MT sessions is two treatments per week using the following parameters:

- Radiation intensity: maximum allowable.
- Pre-installed program: Recovery.
- Frequency: 50 Hz
- Pulse width: disproportionate
- Depth of action: 650 ms
- Ramp: 1.5 s.
- Contraction time: 10 s.
- Relaxation time: 5 s.

The patients who were treated during the trial period of the technology were 9 women, aged 32 to 57, who were treated voluntarily and free of charge.

None of the patients experienced any side effects and all described the experience as very pleasant. It should be noted that in three cases a certain state of satisfaction was mentioned in connection with the arousal of the internal genital organs.

Treatment was provided by non-medical staff - clinical assistants who completed a 4-hour training course.

This new treatment is aimed at increasing muscle loading in the intra-abdominal area, which causes a rapid increase in muscle fibers, similar to high-intensity exercise..

IV. Research observations and results.

Muscle strengthening treatment using Wonder MT technology, based on deep electromagnetic radiation and low frequency electrical stimulation, provides fairly rapid relief of complications associated with urinary loss and dysfunction, as well as muscle weakness.

Below are other positives found during treatment:

- Direct muscle training: emitting devices, whether electromagnetic panels or electrodes, allow you to precisely stimulate the desired area.
- Rehabilitation for flabby muscles: atrophied muscles in the lower back and abdomen are strengthened.
- Improving blood flow to surrounding tissues: the formation of new muscle tissue is a proven effective way to increase blood flow in the treated area.

Before treatment, it is necessary to consider the importance of patient health education, explaining and raising awareness of its importance, partial and complete improvements, quality of life, the possibility of avoiding surgery, etc.

The Wonder device effectively stimulates the pelvic floor muscles, thereby providing a very effective strength training for the pelvic floor muscles. All patients report improvement, and in 4 cases, complete disappearance of symptoms after the sixth session. We believe that treatment with Wonder, if started as early as possible, is a great way to prevent the progression of these diseases.

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