

# PEMF Therapy for Urinary Incontinence

Do you sometimes experience urine leakage while sneezing or laughing? Or does your urine sometimes leak out while you're on your way to the restroom?

Don't worry, you are not alone! About 33 million Americans suffer from urinary incontinence (leakage of urine that is difficult to control). Unfortunately, many of them suffer in silence because they feel embarrassed or they think nothing can be done and accept it as part of their lives.

The truth is, with the latest technology and medical advancements like PEMF devices, incontinence can be easily prevented and treated effectively.

Pulsed electromagnetic field (PEMF) therapy is an innovative, non-surgical treatment that can minimize the risk of bladder leakage episodes in both women and men. All with no surgery and no downtime! Read on to learn how this treatment works and some tips to manage a leaky bladder.

## What is urinary incontinence (UI)?

UI is the involuntary loss of urine due to a lack of bladder control. It may lead to either complete bladder emptying or minor leakage, depending on the situation.

There are several types of UI, each with its own set of causes and symptoms.

- **Stress Incontinence:** This is the most common type and occurs during physical activities like exercising, coughing, sneezing, or laughing.
- **Urge Incontinence (Overactive bladder):** This involves a strong and sudden urge to urinate, followed by an involuntary loss of urine.
- **Overflow Incontinence:** The bladder doesn't fully empty during urination, leading to frequent or constant urine dribbling.
- **Functional Incontinence:** Occurs due to physical or cognitive impairment that makes it difficult to reach a bathroom in time.
- **Mixed Incontinence:** A combination of more than one type, commonly stress and urge incontinence.

Although UI manifests in a variety of ways, it is not a disease but rather a symptom of another problem.

## What causes incontinence?

UI can happen to anyone and at any age. However, it is more common in women over 50. Women are at greater risk than men because they have a shorter urethra (the tube that allows urine to pass out of your body) than men. Thus, any weakening or injury to a woman's urethra is more likely to result in UI.

For women, there can be numerous causes for this. One of the most common factors is pregnancy. Hormonal fluctuations during pregnancy may lead to relaxation of the pelvic floor muscles. Furthermore, the physiological changes during both pregnancy and childbirth may result in damage to the pelvic floor. If these issues are not addressed, they may eventually lead to bladder leakage and other urinary problems. Things might worsen when menopause (the end of menstrual periods) arrives.

Men have UI with aging due to prostate enlargement and other underlying health issues, including diabetes, stroke, and high blood pressure.

Excessive weight, chronic constipation, straining during bowel movements, and constant coughing are a few other causes.

## PEMF therapy for urinary incontinence

PEMF is a non-surgical, non-invasive method used for the prevention and treatment of urinary incontinence caused by a weakened pelvic floor. It works by emitting focused electromagnetic energy deep into the pelvic floor muscles.

The electromagnetic pulses stimulate and activate the pelvic floor muscles and cause them to contract and relax, like when performing pelvic floor exercises. This helps strengthen the pelvic floor muscles, which are crucial for maintaining bladder control and preventing urinary leakage.

PEMF also stimulates the nerves that supply the pelvic area. By targeting these nerves, PEMF may enhance the coordination between the bladder and the pelvic floor muscles.

PEMF could help regulate nerve signals and reduce the overactivity of the detrusor muscle (responsible for bladder contraction). This modulation of nerve activity contributes to better urinary control.

Some studies suggest that PEMF therapy enhances collagen deposition. Collagen provides structural support to the pelvic floor and helps maintain its integrity. The decline in collagen is observed in aging women or after menopause. Therefore, improved collagen

health may contribute to better pelvic muscle function and reduced incontinence symptoms.

## Benefits of PEMF for urinary incontinence

- Helps regain control over the bladder and pelvic muscles
- A comfortable, non-invasive, and safe treatment
- There is no need for recovery or healing time
- Can be done in the comfort of your own home
- Noticeable improvements after a few sessions

## Research supporting the use of PEMF for urinary incontinence

Several studies have shown that PEMF treatment can be beneficial for urinary incontinence.

- **One study** aimed to explore PEMF for treating stress urinary incontinence in women. They found that after two months of treatment, 75% of those who received the active treatment responded positively, compared to 21.7% in the sham group. Participants who continued with more sessions of PEMF also showed improved response rates. The study suggested that PEMF could be a viable option for women who prefer non-surgical treatments for stress urinary incontinence.
- **A recent study** was performed on a group of women with different types of urinary incontinence: urgent, stress, or mixed. The participants received PEMF treatment twice a week for six weeks. The results showed a reduction in the number of leaks from an average of about 4 to just over 1, and this improvement was seen in all groups of women. They also experienced fewer and less severe UI symptoms.
- **The Journal of Physical Therapy Science** released another study. In this research, one group received PEMF treatment along with pelvic floor muscle exercises and guidance, while another group received the same program without PEMF. The group that received PEMF showed better improvement in pelvic floor muscle strength and a significant decrease in the severity of urinary incontinence compared to the group without PEMF.

Overall, these studies suggest that PEMF could be a promising noninvasive treatment option to complement routine therapies for UI.

## What frequency of PEMF should be used for UI?

Based on the conducted study, the suggested frequency for treatment entails the application of intermittent low-frequency stimulation at 15 Hz for 10 minutes, followed by a rest interval of 2 minutes. This is followed by intermittent high-frequency stimulation at 40 Hz for another 10 minutes.

This treatment regimen was administered twice a week for 8 weeks. However, the study also noted that the most optimal response to the treatment was observed after 6 months post-treatment. Therefore, we also recommend using PEMF therapy for a minimum of 6 months to achieve the best results.

## When to use PEMF for UI?

PEMF can be utilized as both a preventive measure and a treatment modality for UI.

### Preventive approach

It can be used by those who are at risk of getting UI, such as women post-pregnancy. Combining PEMF therapy with specialized pelvic floor exercises after childbirth can provide essential support in maintaining pelvic muscle strength and avoiding issues of urine leakage.

For those advancing in age, incorporating regular PEMF sessions can be beneficial. Aging often triggers hormonal shifts that may contribute to bladder leakage issues. By adhering to a routine of PEMF sessions, typically twice a week, individuals can take proactive steps to prevent the development of this condition.

### Treatment Approach

PEMF therapy is increasingly recognized as a valuable treatment approach for stress UI and mixed UI. It can serve as an effective non-surgical option for individuals seeking relief from incontinence symptoms.

## 7 helpful tips to manage urinary incontinence

A holistic and healthy lifestyle can have immeasurable benefits for bladder wellness. Here are some simple tips:

- **Maintain a healthy weight**, excess weight can put pressure on your bladder, contributing to leaks.
- **Stay active and practice Kegels** or pelvic floor muscle exercises to strengthen the muscles that support your bladder.
- **Limit caffeine and alcohol consumption** as they can irritate your bladder and worsen incontinence.
- **Eat a balanced diet** with high fiber to prevent constipation that may strain your pelvic floor muscles.
- **Drink enough water** and avoid becoming dehydrated.
- **Quit smoking** to help keep your bladder healthy.
- **Consider Post-delivery rehabilitation** with a PEMF device to rebuild pelvic muscle strength.

## Takeaway

If you're dealing with UI, do not suffer in silence. The problem can significantly impact your quality of life, self-esteem, and social interactions. Talk to your friends and family, and openly discuss all your symptoms with the doctor. Sometimes, a small condition can lead to UI, and if treatment isn't taken on time, it may become bigger.

The best approach is to proactively address this issue through preventive methods. One of the easiest is Kegel exercise and PEMF therapy. PEMF is not only cost-effective compared to other treatments, but it can also be conveniently used at home. By maintaining regular usage, you might even circumvent the need for surgery.

## References

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