How does PEMF Help In Osteoporosis?

Is your bone weak and fragile? Check whether you are at a high risk of developing osteoporosis. If so, try PEMF therapy. Wondering how PEMF helps in treating osteoporosis?

This article discusses how PEMF helps in osteoporosis. Before getting into that topic, let us first understand the significance of osteoporosis along with its causes and symptoms.

What is osteoporosis?

Osteoporosis is a systemic condition that makes the bone weak and fragile thereby increasing the risk of breaking the bone. It is characterized by the reduction of bone mass followed by the injury of the skeletal system.

When you are young, new bones develop faster than the older ones which leads to an increase in the body mass and reaches the peak in the early 20s. As you age, this bone density gradually decreases.

Usually, bones in the forearm, hip, and back constantly break and get replaced. Osteoporosis develops when the creation of the new bone cannot keep up with the removal of the old bone. It develops gradually over some years. This condition is generally not painful until a fracture occurs. Furthermore, osteoporosis is the common cause of fractures in elders.

What causes osteoporosis?

Here is the list of factors that can increase the risk of osteoporosis:

- Aging
- Gender - Women are at high risk as compared to men
- Heredity
- Vitamin D deficiency
- Excess thyroid hormone can lead to bone loss. It can occur if thyroid hormone medications are taken to treat underactive thyroid or thyroid is overactive
- Overactive adrenal glands and parathyroid glands
- Vitamin D deficiency
- Reduction in the level of hormone estrogen at menopause increases the risk in women. A drop in the hormone level may be experienced during cancer treatments
- Women who had undergone surgery for removal of ovaries

- In men, the testosterone level decreases as they age. Treatment for prostate cancer can also lead to a reduction in the level of testosterone
- The use of corticosteroid medications can interfere with the process of bone-rebuilding
- Medications that are used to prevent cancer, convulsions, transplant rejection, and gastric reflux can also increase the risk of osteoporosis
- Low intake of calcium can lead to early bone loss, reduced bone density, and increased risk of fracture
- Intake of low food (anorexia) can lead to a reduction in the amount of calcium and protein and the number of calories. Menstruation can be stopped due to anorexia in women. In men, it can lead to a reduction in the number of sex hormones, and bones can become weak.
- Having kidney disease
- Tobacco usage can weaken the bones
- People having sedentary lifestyles are at risk as compared to those who are active
- Alcohol consumption
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What are the signs and symptoms of osteoporosis?

In the early stage, there are no signs and symptoms. Once the bones become weak due to osteoporosis, you get the following signs and symptoms:

- Back pain due to the collapsed or fractured vertebra
- Bent posture
- Difficulty in doing normal activities
- A bone fracture which occurs easily
- Occurrence of a fragile vertebral column, hip bone, wrist bone, and ribs
- Loss of height

Osteoporosis can lead to the following complications:

- Hip fractures can be caused due to osteoporosis. It is caused due to falls and can lead to disability followed by death
- The bones which make the spine can become weak causing spinal fractures

How does PEMF help in treating osteoporosis?

PEMF (Pulsed Electro Magnetic Fields) is a form of treatment that uses pulsed electromagnetic waves at a high intensity and low frequency. You can apply it throughout the body or on specific parts of the body.

PEMF application is a traditional and non-invasive mode of therapy that can stimulate the regeneration of the fractured bones and slow down the process of decreased bone density. These electromagnetic waves interact with the cellular structures and promote the recovery of physiological conditions. Furthermore, they can also help in slowing down the loss of bone minerals.

In the case of nerve cells, you can find a quick recovery of the membrane potential thereby inducing an analgesic effect to reduce pain and inflammation. PEMF therapy can also restore optimal ATP production in order to deliver energy to all the body cells.

Additionally, PEMF stimulates the migration of calcium ions into the bones that can help in consolidating the bone mass followed by the natural healing of the fracture.

PEMF devices are used to emit PEMF waves which require the application of a minimum of 4-8 hours per day for 90-120 days. Furthermore, it is also possible to adjust the intensity between 50 and 100 Gauss.

You can undergo this treatment during the daytime in case you are immobilized. However, people who lead an active life may have difficulty undergoing prolonged sessions during the daytime. In that case, they prefer to undergo during the night.

If the condition of osteoporosis is severe, you can combine PEMF treatment with exercise, nutrition, supplements, or hormonal replacement therapy.

Is there any scientific evidence that can prove the effect of PEMF for osteoporosis treatment?

Yes. There are many studies to prove the efficacy of PEMF against osteoporosis.

A 1990 clinical trial published in the Journal of Bone and Mineral Research reported that the application of 72 Hz PEMF waves on bones can help in the treatment of osteoporosis followed by its prevention.

Another 2019 review article published in the Osteoporosis International reported that PEMF can successfully retain bone mass and strength in patients with osteoporosis. Even a 2017 study published in the Scientific Reports journal revealed that PEMF could be an applicable treatment for improving bone quality in patients with type-2 diabetes.

A 2020 review article published in the Biomedicine and Pharmacotherapy Journal revealed that PEMF could be a safe and efficient treatment against osteoporosis. It can significantly reduce pain and improve the quality of life in patients with osteoporosis. There was a significant increase in bone mass density by undergoing PEMF treatment at 100 Hz for one hour per day, which was continued thrice a week for 3 months.

Takeaway

Thus, PEMF treatment offers quick and lasting outcomes for patients with osteoporosis.

Would you like to try PEMF therapy? There is no need to visit the physiotherapy or chiropractor clinic to undergo PEMF treatment. Just buy TeslasPEMF for your home use.