How PEMF therapy improves Blood Circulation

Do you or your loved one has an issue with blood circulation? If so, you may be curious about how pulsed electromagnetic field (PEMF) therapy can help. Your circulation plays a crucial role in your overall health, as indicated by the phrase “life is in the blood.” Without proper blood flow throughout your body, your health can suffer.

So how do you know if your circulation is poor? There are several symptoms to look out for, and if you have received a medical diagnosis, you may be ready to take the next step toward improving your circulation and achieving better overall health.

Proper blood circulation is essential for maintaining the health and functioning of the human body. It supplies oxygen and nutrients to every cell and removes waste products from the body. Any disruption or impairment in this process can lead to serious health complications. PEMF therapy is a noninvasive and safe method that improves blood circulation.

Signs of poor circulation: watch out for these symptoms

Poor circulation can cause serious damage to the body when left untreated. The following are a few of the warning signals to look out for:

Numbness and loss of sensation

Total numbness and loss of sensation in the hands, fingers, feet, and toes can indicate nerve or tissue damage. These symptoms are serious and dangerous which should never be ignored.

Extra sensitivity to cold

When someone has poor blood circulation, they may experience extra sensitivity to cold temperatures in their hands, fingers, legs, and feet. This could be a sign of Raynaud's disease, a condition in which the blood vessels overreact to cold/stress, limit blood flow, causing color changes and sensitivity. It is important to be aware of these symptoms if you have poor circulation, as they could indicate a more serious problem.

Swelling in extremities

Painful swelling can occur in either of the extremities and is typically caused by a vein in the legs becoming inflamed or blocked (varicose veins). Depending on how severe the

swelling is, the discomfort might vary dramatically. Typically, the blood flow of veins is obstructed.

Hair loss

Many people write off hair loss as an inherited feature or just an inevitable part of getting older. Although this is generally true, occasionally, it can also be caused by insufficient blood flow. You may lose hair suddenly and rapidly, which is one sign that your issue may be vascular. In people with ongoing circulation issues, it frequently affects the legs.

Severe or chronic fatigue

Severe or chronic fatigue is an issue for people who aren't moving around and being active. It is most important to remember to always stay active and to keep moving. Short, brisk walks, taking the stairs instead of the elevator, riding a bike around the corner instead of driving, and many other simple activities can help, in addition to PEMF therapy.

Pain in extremities

Blockages in the flow of blood in the arteries are called ischemia. Over time, this problem may lead to sharp and increasingly intense pain called claudication.

Shortness of breath or difficulty breathing

When your lungs do not receive the proper amount of oxygen, bouts with shortness of breath will become more and more common. If ignored, especially during physical activity, it can progress to the point where breathing becomes difficult.

Flaky and dry skin

Many individuals use skin moisturizers and hydrators to treat flaky and dry skin. However, this may be an effective treatment when it is not caused because of poor circulation. Moreover, in such case, the symptom and the root cause both need to be addressed.

Dizzy spells and/or frequent bouts of vertigo

Individuals frequently overlook the significant influence that poor circulation can have on neurological function, which can result in frequent episodes of dizziness and/or vertigo. This may cause mental blur or fog. When this occurs, people frequently struggle to retain fundamental information and, in more severe cases, struggle to focus and concentrate on even the most elementary tasks. When untreated, unusual headaches and greater memory loss may also appear.

Protect your heart: understanding the potential risks of poor blood circulation

Poor blood circulation can lead to a multitude of medical concerns, with cardiovascular problems being one of the most significant one, which can ultimately lead to heart failure. The continual lack of oxygen-rich blood cells in your body can cause long-term damage to many organs. Although these issues may not necessarily indicate poor circulation, they should still be immediately investigated as they could have serious underlying causes. PEMF can help if the primary cause of these issues is blood circulation and its regulation. Trust your body and seek help if something feels wrong, even if symptoms do not show up. Protect your heart by understanding the potential risks for poor blood circulation.

How PEMF therapy improves blood circulation?

PEMF therapy involves the use of low-frequency electromagnetic waves to stimulate and regenerate cells, tissues, and organs. These electromagnetic waves can penetrate deep into the body and activate the cellular metabolism, which can lead to various therapeutic effects, including improved blood circulation.

Vasodilation

One of the main ways by which PEMF therapy improves blood circulation is by promoting vasodilation. Vasodilation is the widening of blood vessels, which allows more blood to flow through them. PEMF therapy has been found to increase the production of nitric oxide that can cause vasodilation. This increased blood flow can help deliver more oxygen and nutrients to the tissues and organs, improving their function and promoting healing.

Enhanced capillary formation

Capillaries are small blood vessels that are responsible for delivering oxygen and nutrients to the cells. PEMF therapy enhances capillary formation, which can increase blood flow and improve the delivery of oxygen and nutrients to the cells. This improved oxygenation can also help to reduce inflammation and promote healing.

Improved blood viscosity

Blood viscosity refers to the thickness and stickiness of the blood. High blood viscosity can make it difficult for the blood to flow through the vessels, leading to poor circulation. PEMF therapy has been found to improve blood viscosity by increasing the flow of charged particles in the blood. This increased flow can reduce the stickiness of the blood and improve its ability to flow through the vessels.

Increased ATP production

The body's primary source of energy is ATP (adenosine triphosphate). It supplies the cells and tissues with energy. PEMF therapy increases ATP generation, which may aid to enhance cellular metabolism and function. The blood circulation and general health may both benefit from this improved function.

Thermography is frequently used to examine the body's blood circulation patterns. The thermogram images show a clear difference in circulation between the bodily regions that were stimulated and that weren't. In particular, in Figure 1 , only the right foot's sole was stimulated, whereas in Figure 2 , the palms, knees, and foot soles were all separately stimulated. Pictures on the left show the condition prior to stimulation, whereas those on the right show the situation following stimulation.

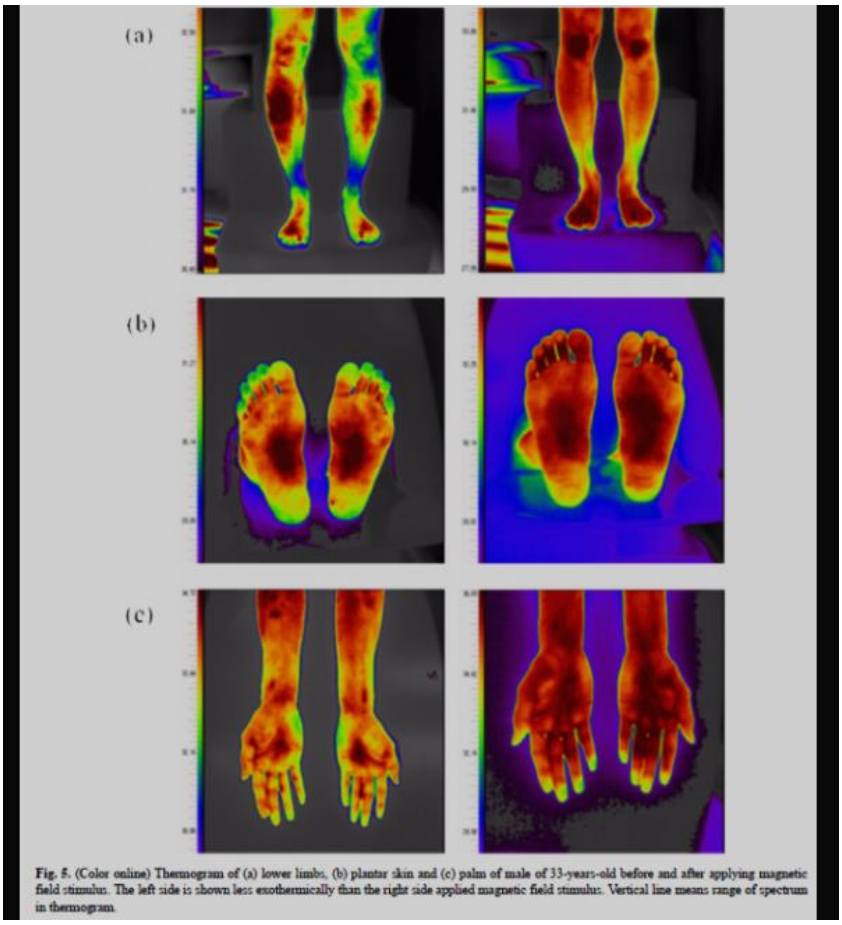

Fig. 5. (Color online) Thermogram of (a) lower limbs, (b) plantar skin and (c) palm of male of 33-years-old before and after applying magnetic field stimulus. The left side is shown less exothermically than the right side applied magnetic field stimulus. Vertical line means range of spectrum in thermogram.

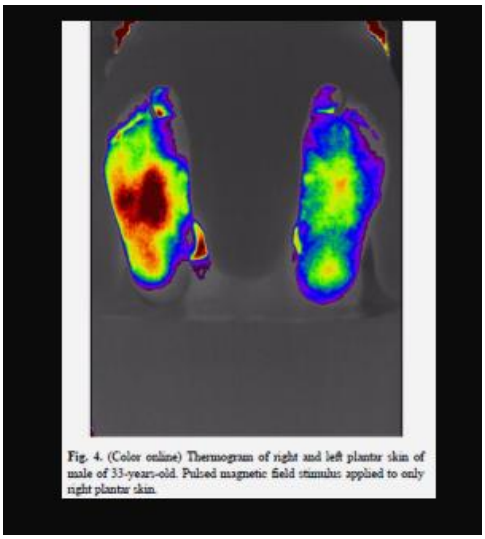

Fig. 4. (Color online) Thermogram of right and left plantar skin of male of 33-years-old. Pulsed magnetic field stimulus applied to only right plantar skin.

Conclusion

PEMF therapy is proven to improve blood circulation by promoting the dilation of blood vessels and increasing blood flow. The electromagnetic waves generated by PEMF devices penetrate deep into tissues and help stimulate the production of nitric oxide, a molecule that relaxes blood vessels and improves blood flow.

PEMF therapy has also been found to promote the release of growth factors and reduce inflammation, which can further improve circulation. By improving blood flow, PEMF therapy can help increase oxygen and nutrient delivery to cells, promote healing and tissue regeneration, and reduce pain and inflammation.

People using PEMF therapy for poor blood circulation experienced better results. PEMF therapy has the potential to become an effective treatment option for a wide range of circulatory disorders.

References

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