

## **Modern Methods of Using Magnets in Medicine**

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**Abstract:** Based on the development of science and technology, new achievements in medicine are being achieved. In recent years, the Ministry of Health has developed methods for using magnets in various pillars. Currently, magnetic ones are widely used in diagnostics, therapy and other areas are effectively used.

Keywords: MRI, health, magnets, magnetism, biomagnetism, blood, treatment, effect.

**Relevance:** Magnetic therapy methods in modern medicine are fully approved by the Japanese Ministry of Health. Swiss doctor Markus Weber conducted research on the mechanism of physical impact of pulsed magnetic field on living organs and tissues. Therefore, the study and justification of the place of magnets in medicine, physical and chemical properties is of great importance.

**Objective:** To study new scientific achievements in the field of medicine, to search for new information in the literature and the Internet on the study of the mechanisms of the impact of magnets and magnetic fields on living organisms, as well as treatment methods in the last 2 years.

**Methods used:** Studies on mice and rabbits have confirmed the effectiveness of magnetic therapy in treating cancer. It has been established that a strong pole magnet stops infectious diseases, and the south pole of the magnet emits heat and energy.

Experiments show that water magnetized by the South Pole enhances plant growth. Conversely, water magnetized by the North Pole slows down plant growth.

**Results:** Biomagnetism and magnetic therapy specialists have experimentally proven that magnetic field treatment eliminates any physical pain, accelerates the healing of wounds and broken bones, dissolves blood clots in blood vessels, and magnetized liquid washes away kidney and gallstones.

Magnetic fields can treat arthritis, asthma, eczema, inflammation, paralysis, polio, decreased joint mobility, and even tumors. The effective treatment of early stage cancer with magnets is now widely recognized. Research into the effects of magnetic fields on water is attracting the attention of biomagnetism experts. They are studying the magnetic field and the effect of magnetism on the most important fluid of a living organism - blood. Physicists have proven that a weak current is generated by the action of a magnet, which increases the movement of iron in the blood. An effect has been discovered in the movement of liquids under the influence of a magnetic field. This increases the rate of ionization, the decay of atoms and molecules, and the red blood cells in the blood are activated to prevent the formation of blood clots. At the same time, the magnetic field prevents the accumulation of calcium and cholesterol, creates hormones and new cells, and rejuvenates tissues.

It has been found that the strong pole of a magnet stops infectious diseases, and the south pole of a magnet emits heat and energy. Experiments show that water magnetized by the South Pole enhances plant growth. Conversely, water magnetized by the north pole slows down plant growth.

For example, if you pour water magnetized by the North Pole on these fragrant flowers, they will not lose their state for a long time. This experiment is of great scientific importance and shows the positive effect of the magnetic field on all living organisms.

For example, in case of water pox in the ovarian membrane, that is, when a large amount of water accumulates around or in the ovarian membrane, strong polar magnets are placed on the soles of the feet of such patients, and the south pole of a ceramic magnet is placed near the affected ovary. In this case, the doctor determines the treatment time depending on the patient's condition. Hypertrophic, i.e. enlarged prostate gland can be treated with the north pole of the magnet for 1-2 hours a day. The south pole cannot be used, as it can lead to an increase in the tumor. To enhance the effect of treatment in severe cases, the method can be used up to 3 times a day. However, it is recommended to drink water magnetized by the south pole (subject to agreement with the doctor) so that urination is not difficult.

Uterine tumors can be treated with very strong magnets. For this, if we direct the north pole to the uterus from the patient's abdomen, we place the south pole behind, that is, the poles should face each other. Only the North Pole is used in the treatment of dangerous tumors. You can also drink water magnetized by the North Pole. This type of additional treatment can be used after consultation with a doctor.

Magnetic treatment of some types of cancer leads to positive results. When treating cancer, it is important to remember that only the north pole should be treated, since the south pole causes cell and tumor growth. If we act with the south pole on the thyroid gland, which has the property of strengthening the immune system, the body's ability to fight cancer cells will increase. The effect of the magnet on the liver helps to get rid of toxic substances in the body. The South Pole improves blood circulation and provides oxygen. Therefore, magnetic therapy can be used in addition to the main treatment. New information about the effectiveness of magnetic therapy in different parts of the world and the results of many studies are still widely disseminated today. Studies on mice and rabbits have also confirmed that magnetic therapy is effective in treating cancer. Special magnetic underwear invented in China is used to treat breast cancer.

Carpal tunnel syndrome is a neurological disorder characterized by pain and numbness in the fingers. This disease is more common in older women, small auto workers, tailors, drummers and painters.

Symptoms of this disease are also observed in those who work a lot at the computer. In such cases, magnetic cuffs and covers are put on. Using the South Pole gives a good effect in prevention. And in light signs both poles are used. In case of painful inflammation only the north pole is used. The south pole is good for a painful wound, and the north pole is good for a bloody wound.

Magnets are good for wound healing. If there is no blood loss, the south pole is used to relieve pain, and if there is bleeding, the north pole. If the north pole is placed on a suture sewn by a surgeon during an operation, the tissues will come together faster and the healing will improve. If the open wound is large, both poles are used, so the north pole is placed higher in the wound, as you can see, and the south pole is placed lower or left on the right side. Washing the wound with magnetized water and drinking magnetized water also provide effective benefits.

Apply the north pole of a magnet to the insect bites and drink the magnetized water.

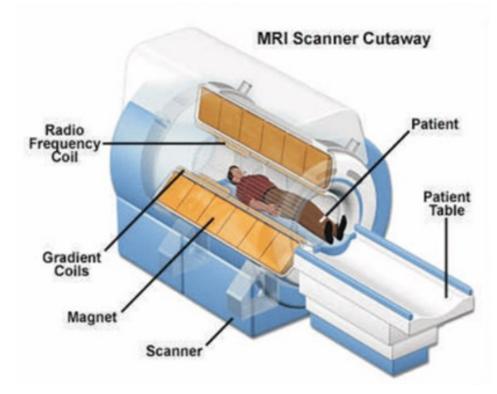
Magnets are widely used for pain, sprains, muscle strains, and bone fractures. If the north pole is applied to the injured area, there will not be even a trace of the swellingThe north pole treatment is continued until the pain disappears. Then the south pole is used to improve blood circulation,

oxygen supply and accelerate cell division. When a bone is fractured, if the north pole is poured out from the upper part of the injury, the bone tissue partially softens and calcium is released from it. If we place the south pole at the bottom of the wound, the unnecessary fluid will flow out and the calcium will go to the part of the bone that needs it. If we apply both poles at the same time, the healing process will be accelerated. In such cases, drinking water magnetized by both poles will speed up the healing of wounds.

For back injuries, magnets are placed at the top and bottom of the spine. In addition, magnetic clothing, belt, and sheet can be used for better treatment effect.

Pain caused by inflammation of the spine and rheumatism can be eliminated with a magnet. If the pain is in the upper or right side, the north pole, if in the left side, or the south pole, then the healing effect will be accelerated if the magnetized liquid is drunk together with the south pole.

MRI (Magnetic resonance imaging) is a non-invasive method that produces exact images of the organs, bones, and tissues of the human body for medical diagnosis and the following treatment. It has been used since the 1970s. From then on, thousands of lives have been saved because their abnormal tissues and tumors can be detected by MRI at an early stage (MPT). The structure of MRI is shown in Fig.1.



(Fig.1. Sources fig, https://www.pmfias.com/nmr-mri/)

The human body is mostly water (hydrogen and oxygen), and when in the massive, stable magnetic field of the scanner, the hydrogen protons get aligned in the same direction. A radiofrequency source is then switched on and off, repeatedly knocking the protons out of line and back into alignment. Receivers pick up radio signals that the protons send out, and by combining these signals, the machine creates a detailed image of the body's inside. Because of the machine's giant magnetic field, hospitals and diagnostic centers issue detailed guidelines to ensure no metal objects are brought close.

In conclusion, at a time when the number of patients with inflammation, circulatory disorders, various acute and chron ic diseases exceeds a thousand, it has become known that magnets are able to treat various common and serious diseases without drugs. Magnets prevent the accumulation of calcium and cholesterol, and rejuvenate tissues by creating hormones and new cells.

## LIST OF REFERENCES

- 1. Ремизов А.Н. Медицинская и биологическая физика. 2018.
- 2. McMahon K.L, Cowin G, Galloway G.J. Magnetic resonance imaging: the underlying principles. 2011.
- 3. Naganuma T, Nakao M, Ichikawa K, Utsumi H.Yakugaku Zasshi. Development of a new redox molecular imaging method. 2015.
- 4. The Role of Magnets in the Medical Field. https://www.stanfordmagnets.com/the-role-of-magnets-in-the-medical- field. html 2024.
- 5. Yuksel et al. The use of neodymium magnets in healthcare and their effects on health. 2018.
- 6. html. Принципы работы МРТ.2020.
- 7. https://mrt24spb.ru/chto-pokazyvaet-mrt Что показывает МРТ. 2024.
- 8. https://mrtdon.ru/mrt/.Что такое MPT все что нужно знать про томографию. 2024.
- 9. https://pubmed.ncbi.nlm.nih.gov/2024.
- 10. https://sibmrt.ru/poleznaja-informacija/otkrytie-centra-magnesija-v-pavlodare.2024.
- 11. https://spbpmc.ru/departments/directions/mrt/ MPT.2023.
- 12. https://www.pmfias.com/magnetic-resonance-imaging/.2024.
- 13. https://www.pmfias.com/nmr-mri/.2022.
- 14. https://www.stanfordmagnets.com/the-role-of-magnets-in-the-medical-field.html(MPT)2024.