

Med & Mind

The Power to Heal

Report on Scientific Efficacy of the

Viofor JPS System

with Emphasis on Arthritic

Conditions

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1 Purpose of Document

The purpose of this document is to clearly define what low induction electromagnetic stimulation therapy is and the healing effects it has for people with arthritis.

2 Executive Summary

The Viofor JPS is a highly sophisticated computer driven therapy system, developed by some of the most eminent and respected Professors in the field of energy medicine. It works by installing packets of sophisticated frequencies and patented wave patterns into the body at a cellular level and is not to be confused with unscientifically proven magnets or magnet therapy.

EU-certified as medical apparatus, winner of some of the most prestigious medical innovation awards across Europe (including Eureka Brussels 2005 & Salon International des Inventions Geneva 2004), myriads of clinical trials in various European countries and the USA have shown that significant improvements can be made by people affected by various conditions including of arthritis. To date there has been over 12,000 clinical trials worldwide on magnetic fields and their effect on the human organism.

The reason people wrongly associate our newly launched product into the UK market, to magnet therapy is because that industry is well established in this country, the products are cheap and can therefore be marketed by anyone whether medically trained or not. Whilst there may be some benefit of magnet therapy to people with arthritis, we understand and respect the general scientific communities consensus that there is not enough evidence to support this very "limited" form of therapy. Indeed, our own technicians view this type of therapy as 'passive', in other words, all the magnets do is speed up the flow of blood through the body area in contact with the magnet. In contrast, magnetic field energy medicine is an accepted form of study both in the UK and worldwide. There have been countless studies, mostly in mainland Europe and the United States of America, regarding the effect of LFMF on pain relief, and we have numerous scientific papers by eminent scientists to back up our equipment specifically.

The development of pulsating LFMF (low frequency magnetic fields) was until recently restricted due to the lack of technology to deliver the package of complex waves and frequencies at the required speed. The latest micro-chip technology has opened an exciting new world of possibilities with the Viofor JPS using the same powerful microprocessor as used in the state of the art Euro-Jet fighter.

3 Important Note: Electromagnetic Stimulation Therapy in Relation to Magnetic Therapy

Due to the naming of electromagnetic waves in the nineteenth century, there is often some misconception to the layman regarding the relationship between magnetic therapy and electromagnetic stimulation therapy. It is important that the reader distinguishes between these terms. To clarify:

A magnetic field: is a static force found in the region around a magnet. Magnetic therapy, **of which Viofor JPS is not**, purports to use the static fields that a magnet creates. There is little scientific evidence that any healing effects penetrate the human organism to any significant degree, other than aligning the polarity of blood particles to improve blood flow speed.

An electromagnetic field: is the field of force associated with electric charge in motion, having both electric and magnetic components and containing a definite amount of electromagnetic energy.

The Viofor JPS system does not contain any solid-state magnets thus the treatments do not employ static magnetic fields in any way. This document explains the science and practice of Low Frequency Magnetic Fields (LFMF) used for therapeutic purposes in many hospitals in mainland Europe.

It is also worth noting that when reading scientific articles relating to low frequency electromagnetic stimulation therapy, it is generally accepted that the words “magnetic field” do in fact refer to LFMF when used in this context and not the static magnetic fields associated with magnet therapy.

4 History of Electromagnetic Stimulation Therapy

In 1821, Hans Christian Oersted, a Danish scientist working in France, experimentally showed that an electrical conductor generated power that affected a compass. At the same time, the Frenchman André Ampère explained that the electrical current generates a magnetic field. In 1864, James Clark Maxwell, a Scottish physicist, formed equations that constituted a scientific foundation for magnetic field theory. All the equipment to generate and use electricity and electromagnetic waves, including the equipment for magnetotherapy is designed based on this theory.

Over recent decades, medical attention focused on non-invasive treatment methods and much has been learnt about the impact of electromagnetic fields in the treatment of a wide range of ailments, including injuries and chronic diseases. Along with developments in mathematics, physics and technology has resulted a new generation of medical devices which has significantly widened the effectiveness of variable magnetic fields in medicine. The Viofor JPS System is at the forefront of this new generation.

Developed over the past fifteen years in Europe by the world's leading authorities in the application of electromagnetic fields in medicine, it is a breakthrough in the treatment of pain and helps to reverse the symptoms of many major conditions.

Conventional electromagnetic therapy systems utilise much higher induction levels with repetitive wave patterns at a set frequency; the high induction levels quickly activate the body's defence

mechanisms and the body tends to adapt to the repetitive stimulus, reducing the effectiveness of the treatment and bringing the practice of magnetotherapy into disrepute.

In comparison, in electromagnetic stimulation, induction levels are much lower, wave patterns are complex and variable and frequencies are combined to create a complex pattern – thereby generating a slow-changing, low induction magnetic field that is tuned to work with the body's natural resonating frequencies, speeding up the body's natural healing process without forcing the body into recovery.

The Viofor JPS is so effective that it is now widely used within the health systems of many European countries, including Germany and France.

5 How Viofor JPS Works

5.1 Magnetostimulation in Rehabilitation

[Professor Tadeusz Mika - Academy of Physiotherapy, Medicine – Physical Education, Warsaw]

In recent years, there has been great interest observed in the therapeutic application of pulsating, extremely low frequency magnetic fields – ELFMF. They are fields of frequency from 3 to 3000 Hz and intensity equivalent to induction = 10 mT. Recently, due to interesting therapeutic results, attention has been drawn to magnetostimulation. It is the term defined by Prof. A. Sieron. We can observe here an analogy to laser therapy, which uses low power radiation, so-called laser biostimulation or low energy laser therapy. Values of magnetic fields used in magnetostimulation are comparable to the Earth field intensity, i.e. 70 μ T.

The effect on the living organism is not yet fully explained. Biological effects are said to be due to extremely low currents, so called Lorentz powers, induced in the tissue during pulsating magnetic field flow.

They cause:

- increase in the permeability of semipermeable membranes
- increase in the membrane and/or ion vibration energy
- effect on electrosomatic physiological processes
- effect on neuronal processes by accumulation of very small potentials

There are estimated to approximately 1000 publications on the physiological and clinical aspects of magnetotherapy and magnetostimulation. It is believed that magnetic fields used in magnetotherapy cause:

- Ca²⁺ penetration into the cell
- stimulation of c AMP formation
- increase in protein absorption
- increase in overall transportation through cell membranes
- stimulation of prostaglandin E formation
- increase of DNA content

As a result, magnetic fields have analgesic, anti-inflammatory and anti-swelling effects. They also increase oxygen utilization and cellular respiration. In addition, they increase blood flow in arteries and capillaries and accelerate wound-healing process.

The above mentioned effects of magnetic fields suggest clearly positive results in rehabilitation, especially in Parkinson's disease, SM and motor system pain syndromes. Currently, based on Sandyk's research, it is believed that such effect is due to modulation of neuron activity as well as effect on pineal gland and melatonin secretion. Clinical analysis of the above data by Professor Sieron et al. promises positive effects of magnetic fields application in the above mentioned diseases.

One of the most interesting areas of magnetostimulation is its effect on bone healing. It has been started by Bassett & Becker [1962], who observed in his work the positive effect of magnetic fields

on bone fracture healing. He states that the very weak currents that occur during application on piezoelectric substances, such as collagen, stimulate activity of the hemogenic cells. This mechanism is especially important in case of bone immobilization. Magnetic fields act similarly to mechanical forces produced by muscles and affecting collagen. Incidentally, it has not been established yet whether such effects are the result of magnetotherapy and its effect on system piezoelectricity, or if they are caused by improved blood supply and oxygen distribution.

Consequently, magnetotherapy and magnetostimulation are widely applied in bone fracture treatment and osteoporosis. Analysis of these disease processes by Professor Sieron et al., based on medical records of patients exposed to such therapy, indicated a positive effect of magnetostimulation on the above indicated diseases.

It should be added that there is a modern generator of such fields, which is produced by Med & Life Poland Ltd. under the name of Viofor JPS. Its design is based on the principle of biological system resonance with pulsating magnetic fields. The apparatus automatically generates fields of frequencies resonating with biological objects.

One crucial effect cannot be omitted when analysing therapy with the use of slow-changing magnetic fields, namely, the effect of organism soothing. It makes such form of therapy applicable not only due to its physiological but also psychological considerations. In other words, it is also useful in psychological rehabilitation. It is extremely important in patients, whose stresses are the result of disability or invalidism.

Despite the lack of strict contraindications to such form of therapy, there is a need, however, to be cautious in case of certain diseases. According to comparison by Gruener, contraindications include: pregnancy, active tuberculosis, thyrotoxicosis, acute coronary failure, unstable angina pectoris, serious viral, bacterial and mycotic infections, as well as electronic implants regulating functioning of various organs. Relative contraindications include active neoplastic disease, despite the fact that recent results of research in this area are very promising.

Data on certain mechanisms of pulsating magnetic field effect on organisms, especially its resonance action, as well as indications, show that it is a method of physical medicine of 21 century with great prospects for the future. One of its main benefits is the possibility to limit medication, especially non-steroid anti-inflammatory medicines, whose long-term application may affect digestive system.

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5.2 Design Parameters of the JPS Viofor System

Report By: Prof. ZW. (dr hab.) Feliks Jaroszyk
Karol Marcinkowski Medical Academy – Poznan Poland

Electromagnetic fields, between frequencies of 0 Hz to 1000 Hz, are called ELF (extremely low frequency).

Electromagnetic waves of this frequency cause neither ionisation nor induction.

For ELF fields it is advisable to treat electric and magnetic fields separately.

Variable magnetic fields, contrary to variable electric fields, are characterized by low suppression coefficient when interacting with biological objects. Due to this fact, magnetic fields are used in medicine (magnetotherapy, magnetostimulation).

In magnetotherapy magnetic field induction is approximately a thousand times higher than the induction of magnetic field used in magnetostimulation.

Biological action of variable magnetic field is the result of three basic effects:

1. Electrodynamical interaction of this field with ionic currents in organism.
2. Ionic cyclotron resonance of cations and anions in bodily fluids.
3. Magneto-mechanical interaction of the magnetic field with particles with uncompensated magnetic spins.

It should be noted that bodily fluids, namely: blood, lymph and intercellular fluid are ionic conductors of the electric current.

The new system VIOFOR JPS uses both types of electrical signals (including magnetic) and their combinations in order to utilize the three above-mentioned basic mechanisms of variable magnetic field absorption by living organisms.

In the MRS 2000 system, developed based on the research by Prof. Ulrich Warnke, only one type of electrical signal was used. The ionic cyclotron resonance mechanism activating ion transport through cell membranes was not used.

Above-mentioned mechanisms: electrodynamical, magneto-mechanical and ionic cyclotron resonance, are involved in interaction with liquid crystalline structures, which are the component of many membranes and cell organelles. Such interaction causes changes in ion permeability through ion channels. The change occurs in the ion distribution intra-and extracellularly. It causes changes in static potential differences within both organelles and cell membranes of living biological systems.

VIOFOR JPS equipment, in its application, meets the requirement of simultaneous functioning of three (1,2,3) mechanisms of interaction of variable magnetic field with the living organism. Compared with previous magnetostimulation methods, it causes increased ion transport in cell membranes and organelles.

This way, VIOFOR JPS turns magnetostimulation development in a new direction and is viewed as an indisputable success of Polish science and technology.

5.3 Requirements for the Safe Application of Magnetic Fields In Medicine

The development of medical application of variable magnetic fields has been very dynamic recently. Apart from indications regarding the application of magnetic fields, the most important aspect for now is the need for safety requirements both for patients and medical personnel. The information presented below on the safe application of magnetic fields comes from scientific literature and from personal, clinical experience of the authors of the present article, who have used magnetic fields for 15 years in hospital and clinical treatments.

The safety requirements for the application of magnetic fields in medicine include:

- patient and personnel protection against electric shock
- protection of operators of magnetotherapy and magnetostimulation equipment against harmful effect of magnetic field
- contraindications of magnetic field application for certain diseases
- contra-indications due to possibility of side effects

The Viofor equipment has no danger of electric shock. Electric current transformation inside the equipment for magnetostimulation is such that, even in case of coil perforation and short-circuit with the patient's body, it will not be harmful.

In typical circumstances, the harmful exposure of the operators of magnetotherapy and magnetostimulation equipment to magnetic fields is minimal. This is due to the fact that magnetic field induction decreases hyperbolically with the distance from the source. Therefore, the exposure of equipment operators to magnetic field occurring during manual parameter setting and pushing the start button is irrelevant from a medical point of view. Additionally, modern equipment can be operated through the remote control, which completely eliminates the operator's exposure to magnetic field.

The safety of magnetic field effect, similarly to other physical aspects and pharmaceuticals applied in medicine, is the derivative of:

- known negative effect
- possible negative effect
- lack of knowledge of negative effect

The possibility of application of magnetic field in medicine is the result of basic biological effects that are the subject of clinical and experimental research. They include the following effect:

- analgesic
- improvement of tissue oxygen utilization
- vasodilatation
- regeneration
- relaxation
- antispasticity

The mechanisms of biological effect of magnetic fields influence the potential side effects of their use.

The possibility of negative effect of magnetic field on human body has to include the contraindications that are most often described in medical literature:

- pregnancy
- neoplastic disease
- active tuberculosis
- juvenile diabetes
- alimentary tract bleeding
- serious viral, bacterial and mycotic infections
- electronic implants
- metal implants

6 Manufacturers Information

6.1 About Med & Life



Med & Life is the manufacturer and distributor of **Viofor JPS**

Company Name: Med & Life Sp. z o.o.

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Managing Director: Irena Osiak

6.2 Med & Life and the Viofor JPS System

Med & Life Poland Ltd has been promoting magnetostimulation in Poland for several years. Scientific and clinical research have been conducted in order to analyze the influence of slow-changing magnetic fields generated by MRS 2000 on living matter. Magnetic field induction generated by MRS 2000 is slightly larger than the horizontal component induction of geomagnetic field. Med & life Poland Ltd. has invited renowned Polish specialists to its Scientific Board that coordinates scientific and clinical research programs.

The member of the Board are, in the alphabetical order. Assistant Professor Stanislaw Grabiec Ph.D. (biophysics – Polish Academy of Sciences, Warsaw), Prof. Feliks Jaroszyk (biophysics – Medical Academy, poznan), Prof. Tadeusz Mika (physiotherapy, medicine – Academy of – Physical Education, Warsaw), Prof. Janusz Paluszak (physiology, medicine – Medical Academy, Poznan), and Prof. of Medical Science Aleksander Sieron (medicine, physical medicine – Slask Medical Academy, Katowice.) Three times a year, members of the Scientific board give plenary lectures at State symposiums for doctors and physiotherapists dealing with scientific and clinical research in magnetostimulation.

The results of the research have laid grounds for further development of equipment for magnetostimulation as well as its methods of application.

We can state that the period of research with the use of MRS 2000 has also been a “prenatal” stage of the new method and its apparatus, later known as VIOFOR JPS.

At this point, it is important to stress that VIOFOR JPS is the pioneer in the field of the new generation equipment for magnetostimulation. Although it utilizes technology of MRS 2000 (mainly in method of application) it differs greatly from its predecessor.

The abbreviation JPS is formed from initials of the authors of magnetostimulation method (Jaroszyk, Paluszak, Professor Sieron) which was further used in the generating-steering apparatus VIOFOR JPS.

Best polish specialists in electronics have participated in design and build of VIOFOR JPS. Prof. Janusz Paluszak, and Prof. Aleksander Sieron represent both general and clinical science.

Prof. Janusz Paluszak has thoroughly analyzed JPS signals and their biochemical-physiology influence on a living organism.

Prof. Aleksander Sieron has presented application methods of JPS signals and has thoroughly analyzed clinical aspects of their influence on a living organism.

Mr. Waldemar Deka, P.Eng., M.Sc., has supervised the project and design of the apparatus generating signals according to JPS method.

Mr. Jaroslaw Osiak, Vice-President of Med & Life has also been deeply involved in the development of VIOFOR JPS apparatus.

VIOFOR JPS system consisting of the apparatus and the magnetostimulation method of its application has been prepared for patenting according to regulations and requirements of Polish patent Bureau.

6.3 Product Certifications



MDD 93/42/EEC - certificate of conformity with the demands of European Union Directive on medical devices, allowing Viofor JPS System to be CE 0120 marked.

EC conformity for therapy and rehabilitation:

- ❑ Viofor JPS System Standard with magnetic field, with or without light source (medical product class IIa – Annex IX, Rule 9)
 - ❑ Viofor JPS System Classic with magnetic field, with or without light source (medical product class IIa – Annex IX, Rule 9)
 - ❑ Viofor JPS System Clinic with magnetic field, with or without light source (medical product class IIa – Annex IX, Rule 9)
 - ❑ Viofor JPS System Delux with magnetic field, with or without light source (medical product class IIa – Annex IX, Rule 9)
 - ❑ Viofor JPS System Light with light source, with or without magnetic field (medical product class IIa – Annex IX, Rule 9)
 - ❑ Viofor JPS System Laser with or without magnetic field (medical product class IIb – Annex IX, Rule 9)
- conform to the essential requirements and the guidelines of the Council Directive 93/42/EEC – Medical Devices and with harmonized standards:
- EN IEC 60601-1 “Medical electrical equipment” with the supplements and linked standards
 - PN-EN 60825: 2000/A2: 2002 (U) Safety of laser products. Equipment classification, requirements and user’s guide is a subject of the procedure mentioned in the Annex II of the Directive 93/42/EEC.



Med & Life has implemented the Quality Management System according to ISO 9001: 2000/ ISO 13485: 2003 under the surveillance of the Notified Body nr 0120, SGS United Kingdom Ltd Systems & Services Certification.

6.4 Product Awards

The Viofor JPS System has won many awards and honours in Poland as well as abroad. We present the most important of them:

- **Polish Product of the Future 2000**
award in category: product of the future for Viofor JPS System
- **Award in category: rehabilitation equipment**
for Viofor JPS system on VII Rehabilitation Equipment and Equipment for Disabled Persons Fairs "Rehabilitacja" in Lodz.
- **Polish Invention of the Year 2000**
for magnetostimulation JPS method, awarded by World Foundation Health-Mind-Health and International Awards Capitule
- **Gold medal**
during the 50 World Exhibition of Inventions, Research and New Technologies „Brussels Eureka”2001 in Brussels
- **Gold medal**
during 101 World Salon of Inventions „Concours Lepine” in Paris
- **Gold medal**
on the fairs„Ideas-Inventions-News” IENA 2002 in Nurnberg
- **Gold medal**
on International Fairs of Inventions and New Technologies „Invest-Technology” in Warsaw
- **Medal**
on the fairs„INTARG-Katowice 2002”
- **Main prize in the competition Polish Product of the Future 2002**
- **Gold medal with merit**
on international exhibition INNOWACJE 2003
- **silver medal**
on the International Exhibition of Inventions 2004 in Geneve
- **Golden Aesculapius**
on Poznan International Fairs SALUS’2004
- **gold medal**
for Viofor JPS Light during 104 World Salon of Inventions „Concours Lepine” 2005 in Paris
- **silver medal**
for Viofor JPS Laser during 104 World Salon of Inventions „Concours Lepine” 2005 in Paris

7 Scientific Trials – Articles Specifically Relating to Viofor JPS in the Treatment of Arthritis

7.1 Analysis of the Therapeutic Efficacy of Magnetostimulation provided by Viofor JPS System in Selected Diseases

[Aleksander Sieroń, Karolina Sieroń-Stoltny, Tomasz Biniszkiwicz, Agala Stanek, Tomasz Stoltny, Katarzyna Biniszkiwicz
Journal: Acta Bio-Optica et Informatica Medica, Vol 7. 2001 pp.1-8]

Summary

The authors analysed anonymous inquiries filled by patients after having completed magnetostimulation with support of Viofor JPS system, characterized with maximal magnetic field induction up to $45\mu\text{T}$. The analysed group consisted of 69% patients with disorders of movement system, 25% patients with neurological disorders and per 1% of patients with neurosis, insomnia, night urination, asthma, skin allergies and paranasal sinusitis. Improvement or retreat of complaints was noted by 89-100% of patients with disorders of movement system (particularly in subgroup with osteoarthritis) and by 90-99% of patients with neurological disease (particularly in subgroup with parkinsonian syndromes). The main evidence of improvement was the diminution or retreat of pain and improvement of range of movements in painful joints and paretic limbs.

The study of over 3,000 patients covered a variety of diseases. Those relating to arthritis, (1,296 patients) are presented in the excerpt below:

Condition	Number of Patients	Complete Remission (%)	Substantial Improvement (%)	Improvement (%)	Lack of Improvement (%)	Deterioration (%)
Arthritis of the spine	702	21	51	21	6	1
Arthritis of the hip	259	23	49	25	2	1
Osteoporosis	44	-	34	55	11	-
Inflammation of soft tissue around the joints	61	39	35	23	3	-
Arthritis causing atrophy of the spine	13	-	61	39	-	-
Rheumatoid arthritis	55	2	40	53	5	-
Bone fractures	64	31	47	22	-	-
Movement impairment (without bone fracture)	98	56	34	9	1	

Table 4: Subjective evaluation of the efficacy of the treatment by the patients completing questionnaires suffering from movement impairments after conclusion of magnetostimulation treatment using Viofor JPS.

7.2 Estimation of Clinical Efficacy of Viofor JPS System Magnetic & Light Therapy – Device For Magnetostimulation Connected With Light Energy In The Treatment Of Degenerative And Inflammatory Diseases Of Joints

[Prof. Aleksander Sieroń, *Balneologia Polska*, vol XLVI, 2004, pp.42-58]

Summary

The aim of this study was to estimate a clinical efficacy of Viofor JPS System Magnetic & Light Therapy-device for magnetostimulation connected with light energy used as monotherapy in the treatment of patients suffering from degenerative and inflammatory diseases of joints, and the comparison of different magnetic-light applicators using red (wavelength: 840-860nm) and infrared (wavelength: 625-635nm) light generated by diodes LED in the treatment of particular diseases. In this trial 32 patients of both sex with pain syndromes in the course of coxarthrosis (16 patients), gonarthrosis (8 patients) and rheumatoid arthritis of carpometacarpal articulation of thumb (8 patients) were treated. In the therapy elliptic magnetic-light applicators were used generating variable magnetic field with saw-like shape of impulse and mean induction value of 53,4 μT as well as light with energy density of 8,18 and 1,64 J/cm^2 , respectively. The therapeutic cycle consisted of 10 daily exposures lasting 12 minutes each (program – P2, mode of application – M2, intensity – 6). As a result of performed procedures in all diseases a distinct reduction of pain intensity estimated by means of Huskisson's visual-analog scale VAS persisting in case of superficially located joints also in 5th day after the end of exposure cycle was observed. The strongest and the most persistent analgesic effect was obtained using magnetic-light applicators generating infrared light, especially in case of gonarthrosis and arthritis of carpometacarpal articulation of thumb.

7.3 Estimation Of Therapeutic Efficacy And Tolerance of Magnetostimulation With Use Of Viofor JPS System in the Treatment of Children With Juvenile Idiopathic Arthritis

[Prof. Aleksander Sieroń, *Balneologia Polska*, vol XLVI, 2004, pp.86-92]

Summary

The aim of the study was to estimate therapeutic efficacy of magnetostimulation with use of Viofor JPS system with routine big flat applicator and additional elliptic applicators for local use in the treatment of children suffering from juvenile idiopathic arthritis. 33 children aged 4 to 18 years with various course of a disease and location of inflammatory process in single or numerous joints were treated. As a result of a cycle of 14 everyday exposures (programme: P3, mode of application M2, time of single exposure: 12 minutes daily, intensity of field increasing in succeeding days from 0,5 to 7) a significant clinical improvement was obtained in 96.9% of patients, particularly in form of decrease in pain intensity during motion of affected joints (84.3% of patients), improvement of mobility of all joints (76.8% of patients), reduction of dimension of joint oedema (46.6% of patients) and normalization of temperature in periarticular tissues (68% of patients). Decrease in subjective pain sensation in affected joints estimated in Huskisson's visual-analog scale VAS of 59.6-89.5%, and shortening of morning stiffness duration of 50-84% was observed, depending on the form of the disease. The best results were obtained in patients with location of inflammatory process in single joints, especially in case of subacute and acute course of a disease. On the basis of obtained results it was concluded that magnetostimulation with use of Viofor JPS System could make a valuable, assisting method in the treatment of juvenile idiopathic arthritis, due to high therapeutic efficacy, functionality of particular applicators and good tolerance of exposures by patients.

7.4 Use Of Variable Magnetic Field Of Low Frequency In Degenerative Knee Joint Disease

[Ewa Boerner, Marzena Koblanska, Ewa Biec, Barbara Ratajczak, Ewa Demczuk-Wlodarczuk, Aneta Demidas. Journal: Acta Bio-Optica et Informatica Medica, Vol 9. 2003 pp.131-135]

Abstract

The work deals with application of magnetotherapy for treatment of degenerative disease of knee joint. It was statistically proved that this kind of treatment is beneficial for lowering of pain level, increases the locomotory ability and decreases the swollen tissue.

Key words: magnetic field, degenerative knee joints disease

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1. Introduction

Gonarthrosis is one of the most frequent pathologies of knee. Degenerative joint disease is the most prevalent disease of motor apparatus. First, non-clinical changes may occur in the second or third decade of life. 35% of people aged 45-65 years suffer from the disease and 60-70% of people over 65 years old. Gonarthrosis has third place after coxarthrosis and degenerative changes of spine. It affects 5% of population, in 75% of cases are women. The disease makes women unable to work and often disable. Gonarthrosis is caused by repeated mechanical injuries, changes connected with strain put on the joint, which may be connected with strain put on the joint, which may be connected with age, sport injuries, excessive body weight or anomalies in body^[1]. Patients with degenerative changes are treated in a complex way and, apart from anti-inflammatory action, various of pain-relieving agents are administered^[2]. Physiotherapy plays significant role in analgesic treatment. The aim of physiotherapy is to reduce pain, muscle tone, tissue oedema and to prepare patient for kinesitherapy aimed at sustaining or restoring proper mobility in joints affected by the disease.

More and more frequently magnetotherapy is used^[3]. Treatment with magnetic field is a natural, biological form of therapy. It has been known since ancient times. Scientific bases for this kind of treatment appeared in the 20th century. The properties of magnetic fields, their effect on human organism were studied and better therapeutic devices are constructed^[4,5]. The purpose of this study was to assess efficacy of magnetic field of low frequency in gonarthrosis.

2. Materials and methods

The subjects of the study were patients from Wrocław's outpatient clinic suffering from degenerative knee joint disease involving both knee joints. Patients were not subjected to any other therapy during treatment. The research group consisted of 30 patients aged 56-65 (22 women and 8 men). Most of them with pain and limited mobility in knee joints. Characteristics of the group are shown in Table 1.

Table 1. Characteristics of the group

Total	Women			Men		
	Patients number	%	Mean age	Patients number	%	Mean age
30	22	73.3	60.4	8	26.7	61.4

Before therapy, history of the patients was taken: first name, surname, age, sex, duration of the disease. All patients were subjected to the procedures with magnetic field of low frequency. Apparatus emitting sinusoidal impulses, 1-10 mT, frequency 20-50 Hz, was used in the procedures. During the procedures, first, small intensities were used, then, the intensities were gradually increased to maximal dose. Applicator in shape of a spool with 315mm diameter adjusted to the shape of the area subjected to the procedure. Each procedure lasted 20 minutes. 15 procedures were recommended. First 10 procedures were carried out every day and the following 5 procedures were carried out every second day. Each patient had procedure carried out at the same time of the day. All patients were examined before the therapy and just after its completion. The examinations involved the area of two lower limbs. Obtained results were statistically analysed.

- Measurement of the range of flexion motion in knee joints.
- Measurement of circumference of both limbs at three levels, with precision to 0.5 cm: on the level of knee crevice, on the of medial head of quadriceps muscle of thigh, on the level of lateral head of quadriceps of thigh.

Pain was assessed on Domżał's modified 10 degree numeric scale [2], where 0 means lack of pain, 10 means severe pain.

3. Results

The results of the assessment of efficacy of therapy with magnetic field in degenerative knee joint disease as far as pain, range of mobility and circumference are concerned, on the level of knee joint, lateral head and medial head of quadriceps muscle of thigh before and after the therapy are shown in table 2 and 3.

Median value indicates that 50% of studied patients experienced before therapy chronic pain, increasing in severity with every change of position. Whereas, after therapy, in 75% of studied cases there was a reduction of severity of pain to the level of slight pain occurring every day with small intervals. Comparative analysis indicates that therapy has statistically significant effect on both lower limbs (Table2).

Analysis of the range of movement in knee joint in sagittal plane before and after therapy indicates significant reduction of limitation in flexion. Mean values of the range of movement indicate statistically significant increase in the range of flexion movement after therapy (Table 3). Also values of circumferences measured at the level of knee joint crevice of both lower limbs indicate significant reduction of circumferences after procedure with variable magnetic field. It may suggest reduction of oedema and positive effects of the therapy in degenerative knee joint disease. Calculated mean values of circumferences of both limbs at the level of medial head of quadriceps muscle of thigh indicate significant reduction of their circumference after therapy. No statistically significant variance was found in measurements of circumference of lower left limb before and after therapy at the level of lateral head of quadriceps muscle of thigh (Table 3). It can be assumed that it was a result of reduction of oedema and not wasting of the mass of quadriceps muscle of thigh.

4. Discussion

Research studies carried out by Sieroń and his co-workers [7-9] indicate that that there is a wide spectrum of effects that magnetic field exerts on processes of aerobic and anaerobic respiration. It was also found that due to increased emission of endogenic opiates, magnetic fields alleviate pain. It was found that in treatment of degenerative joint disease, therapy with magnetic field is one of the most beneficial physiotherapeutic methods. On the basis of conducted study, the researches came to the conclusion that magnetic field of low frequency has positive effect on alleviation of pain. It was also noticed by Sieroń and Krawczyk-Krupka [6] who claim that therapy with magnetic field of low frequency has positive effect on reduction of pain and, thereby, is an alternative method for analgesic pharmacological agents.

Table2. Statistical characteristics of the level of pain and comparison between the values of pain (Wilcoxon's test) before and after therapy with magnetic field

Method		Median	Minimum	Maximum	Lower quartile	Upper quartile	Gap quartile	Wilcoxon test
Right lower limb	Before therapy	8.0	7.0	9.0	8.0	8.0	8.0	4.78
	After therapy	1.0	0.0	3.0	0.0	2.0	2.0	
Left lower limb	Before therapy	8.0	7.0	9.0	8.0	8.0	8.0	4.78
	After therapy	1.0	0.0	3.0	1.0	2.0	2.0	

With bold letters-significance of difference at the level p 0.05

Table 3. Statistical characteristics of values of range of mobility and circumference before and after therapy and their comparison using t-Student test

Trait		Right lower limb			Left lower limb		
		x	sd	t-Student test	x	sd	t-Student test
Range of movement	Before therapy	120,50	9,43	6,87	120,50	9,11	6,54
	After therapy	122,26	9,13		122,33	8,70	
Circumference at The level of knee Joint crevice	Before therapy	46,83	5,71	3,16	46,68	5,37	3,6
	After therapy	45,0	5,74		45,50	5,30	
Circumference at the level of medial head	Before therapy	49,63	5,83	2,46	49,95	5,64	2,98
	After therapy	48,73	5,86		48,68	5,09	
Circumference at the level of lateral head	Before therapy	53,26	6,06	5,96	53,00	5,63	1,22
	After therapy	53,20	6,05		52,95	5,60	

With bold letters is written significance of difference in values at level p 0.05

Increase in the range of movement in studied knee joints was probably connected with the fact that pain was reduced, what contributes to improvement in mobility and to maintaining necessary range of movement. Magnetic field of low frequency has also anti-inflammatory effect and it can also contribute to reduction of pain and improvement in mobility joints, as well as to reduction of oedema. Observed significant statistical differences in measurements of circumference indicate that it is an effective anti-inflammatory therapy. Also other authors [7,8,9] draw attention to the analgesic, anti-inflammatory and anti-oedema effects of magnetotherapy in treatment of degenerative changes. Many studies [2,10] confirm that there is reduction of pain, improvement of mobility in joints in patients suffering from osteoporosis after this therapy. The results obtained in the study are compatible with reports of other authors [5,6,7,8] who confirm that magnetic field of low frequency is effective in treatment of gonarthrosis. The fact that magnetotherapy has become a prevalent physiotherapeutic method is a confirmation that it is a right choice of therapy of people with degenerative knee joint disease.

5. Conclusions

Therapy with magnetic field of low frequency has significant effect on reduction of the level of severity of pain in patients with degenerative knee joint disease.

Therapy with magnetic field of low frequency contributes to the increase in the range of movement of joints.

Reduction of circumference in the area of knee joints of patients subjected to magnetotherapy indicates that oedema was reduced as a result of therapy.

7.5 Evaluation of Magnetostimulation Effectiveness in Physiotherapy

[Woldanska-Okonska M, Czernicki J. - PMID: 15181749 PubMed - indexed for MEDLINE]

The anonymous questionnaires which had been filled in by patients were analysed after the end of the magnetostimulation applied with Viofor JPS. The applicator in form of a mattress with maximum induction 45uT was used. In the analysed group of 1742 patients, 5% of patients suffered from rheumatoid arthritis, 16% from central nervous system illnesses, 9% from injuries, 1.5% from allergies, 2% from infections, 5.4% from vessel illnesses, 1% from skin illnesses. 0.5% of the patients used monotherapy. 8% suffered from radicular symptoms, 30.7% from pseudoradicular symptoms, 17.4% from arthrosis, and 3.4% patients suffered from migraines and headaches. The complete abatement of complaints or the improvement was noted in 95.5% of patients, no improvement in 4.3% and 0.2% of patients became worse – 82% of deterioration patients were the ones that suffered from infections. The strongest analgesic action and the most frequent abatement were noted in patients after injuries and patients with headaches.

8 Scientific Articles – General Trials Relating to the Therapeutic and Analgesic Effects of Low Frequency Electromagnetic Fields

8.1 Magnetostimulation in Pain Medicine

[Ewa Boerner, Marzena Koblanska, Ewa Biec, Barbara Ratajczak, Ewa Demczuk-Wlodarczuk, Aneta Demidas. Journal: Acta Bio-Optica et Informatica Medica, Vol 9. 2003 pp.131-135]

Summary

Physical management in terms of analgesic action is used by means of several mechanical and physical methods. Slow alternating magnetic field magnetostimulation with very low magnetic induction is one of very interesting methods. Advantageous biological effects of these magnetic fields acting on live organism, broaden its use in physiotherapy and caused its use in pain medicine. In the publications there are shown the results of investigation indicating increase of blood flow and decrease of muscle tension during the magnetostimulation. These effects caused usage of magnetostimulation for managing the pain syndromes common in the course of many nervous, bone-and-joint, blood and metabolic diseases. Occurrence of the special resonance frequencies connected with the acting of alternating magnetic fields on biological objects, is a background of the ionic cyclotron resonance theory. Polish scientists, authors of this method, conducted comprehensive biotechnical and clinical analysis of the original Viofor JPS device in which one can use electrodynamic effect of alternating magnetic field on body ions currents, ionic cyclotron resonance of cations and anions of the body fluids and magnetomechanic action of magnetic fields on particles with non-compensated magnetic spins. Because of these effects it come to changes in distribution of ions in intra- and extracellular compartments and differentiations of quiescent potentials. These cause advantageous increase of ion transport in cellular membranes and organellas. 5 years experience of the authors with managing the chronic pain patients with Viofor JPS device, was presented in short review of acquired analgesic effects, emphasising algesiologic action of magnetostimulation.

8.2 Report on the Use of Viofor JPS Magnetic Stimulation Beds in Substance Use Rehabilitation

The UK government-funded Skipton (Yorkshire, UK) Drugs and alcohol rehabilitation centre, run by Malcolm Bray, is one of the most successful units in the country. They started using the Viofor JPS low induction electromagnetic stimulation therapy system back in 2004 and use it to this day as a vital part of their everyday therapy for assisting in the rehabilitation of people with drug and alcohol dependencies.

Malcolm Bray is currently writing a paper on his findings based on a three year usage of the Viofor JPS in the centre. This report will be submitted to the relevant national bodies for evaluation with a view of expanding this effective form of therapy across the UK.

Below you will find Malcolm Bray's report based on the first 12 months of usage in the centre. This again shows clearly that the Viofor has been used successfully in a government-funded unit and that it offers conclusive proof of the system offering benefits to people being treated for addictions.

REPORT ON THE USE OF VIOFOR JPS MAGNETIC STIMULATION BEDS WITHIN A SUBSTANCE USE REHABILITATION AGENCY JUNE 2005

WRITTEN BY MALCOLM BRAY of CODA (Craven Organisation for Drugs and Alcohol)

[Malcolm Bray has been working in the drugs field since 1977 and has worked with both residential rehabilitation and street agencies during that time. He holds a diploma in counselling and has a Master Practitioner certificate in NLP. He also gained a qualification in Social Work in 1983.]

We have now been using this form of therapy for almost one year within the Substance Use Rehabilitation Agency that I work for.

The Magnetic Stimulation beds have been used to assist our work in a number of ways:

- Service users have said that withdrawal symptoms have been greatly or completely removed after a treatment with the bed.
- This agency has used the bed successfully for opiate users, alcohol users, individuals with benzodiazepine problems and for those people with issues relating to stimulant drugs.
- We have seen the bed work really effectively in addressing the pain that some individuals have experienced from Deep Vein Thrombosis.
- As you will know, withdrawal and abstinence often unmask symptoms of depression and anxiety and the Viofor bed acts to enable the individual to change their emotional state without reliance on prescription drugs and with none of the unpleasant side effects that these drugs cause.
- Individuals often have trouble sleeping and we have found that the bed is of immense use in helping induce sleep for service users and again it is a real and positive alternative to habit forming tranquillisers.
- Service users have commented on the analgesic qualities of the magnetic stimulation bed after undergoing therapy.

Many service users have talked to us about the unpleasant emotional states they find themselves in either as a result of their history, or as an effect of their ongoing drug use. For all of us in the rehabilitation field, the answer does not lie completely with the development of better or more efficient drugs - cures do not exclusively come out of bottles.

One view, when looking at emotions, suggests that they are – at least to some extent – the result of neurochemistry and elaborate electrical activities and pathways of the brain.

One way of getting service users to gain some control over their lives is to alter that chemical composition and re-orient that circuitry. The Viofor bed has helped achieve this by offering a viable and effective alternative to the use of prescribed drugs.

The magnetic stimulating qualities of the bed have proved a strong adjunct to the counseling and psychotherapy approaches used at this agency in aiding the development of coping skills and in dealing with difficult emotions.

All in all, I feel that this one year experiment with Viofor magnetic stimulation equipment has been an extremely useful therapy that this agency will continue to use.

8.3 Analysis of Therapeutic Efficacy of Magnetostimulation Provided by Viofor JPS System in Selected Diseases

[Aleksander Sieron, Karolina Sieron-Stoltny, Tomasz Biniszkiewicz, Agata Stanek, Tomasz Stoltny, Katarzyna Biniszkiewicz. Journal: Acta Bio-Optica et Informatica Medica, Vol 7. 2001 pp.1-8]

The authors analyzed anonymous inquiries filled by patients after having completed magnetostimulation with support of Viofor JPS system, characterized with maximal magnetic field induction up to 45 μ T. The analyzed group consisted of 69% patients with disorders of movement system, 25% patients with neurological disorders and per 1% of patients with neurosis, insomnia, night urination, asthma, skin allergies and paranasal sinusitis. Improvement or retreat of complaints was noted by 89-100% of patients with disorders of movement system (particularly in subgroup with osteoarthritis) and by 90-99% of patients with neurological disease (particularly in subgroup with parkinsonian syndromes). The main evidence of improvement was the diminution or retreat of pain and improvement of range of movements in painful joints and paretic limbs.

8.4 Exposure to A Specific Pulsed Low-Frequency Magnetic Field: A Double-Blind Placebo-Controlled Study of Effects in Pain Ratings in Rheumatoid Arthritis and Fibromyalgia Patients

Shupak NM, McKay JC, Nielson WR, Rollman GB, Prato FS, Thomas AW.
Lawson Health Research Institute, St. Joseph's Health Care, London, Ontario N6A 4V2.
Pain Res Manag. 2006 Summer;11(2):85-90.
PMID: 16770449 [PubMed - indexed for MEDLINE]

BACKGROUND: Specific pulsed electromagnetic fields (PEMFs) have been shown to induce analgesia (antinociception) in snails, rodents and healthy human volunteers. **OBJECTIVE:** The effect of specific PEMF exposure on pain and anxiety ratings was investigated in two patient populations. **DESIGN:** A double-blind, randomized, placebo-controlled parallel design was used. **METHOD:** The present study investigated the effects of an acute 30 min magnetic field exposure (less than or equal to 400 microTpk; less than 3 kHz) on pain (McGill Pain Questionnaire [MPQ], visual analogue scale [VAS]) and anxiety (VAS) ratings in female rheumatoid arthritis (RA) (n=13; mean age 52 years) and fibromyalgia (FM) patients (n=18; mean age 51 years) who received either the PEMF or sham exposure treatment. **RESULTS:** A repeated measures analysis revealed a significant pre-post-testing by condition interaction for the MPQ Pain Rating Index total for the RA patients, $F(1,11)=5.09$, $P<0.05$, estimate of effect size = 0.32, power = 0.54. A significant pre-post-effect for the same variable was present for the FM patients, $F(1,15)=16.2$, $P<0.01$, estimate of effect size = 0.52, power = 0.96. Similar findings were found for MPQ subcomponents and the VAS (pain). There was no significant reduction in VAS anxiety ratings pre- to post-exposure for either the RA or FM patients. **CONCLUSION:** These findings provide some initial support for the use of PEMF exposure in reducing pain in chronic pain populations and warrants continued investigation into the use of PEMF exposure for short-term pain relief.

8.5 Treatment of Knee Osteoarthritis with Pulsed Electromagnetic Fields: A Randomized, Double-Blind, Placebo-Controlled Study

[Thamsborg G, Florescu A, Oturai P, Fallentin E, Tritsarlis K, Dissing S.
Department of Geriatri and Rheumatology, Glostrup Hospital, 2600 Glostrup, Denmark.
PMID: 15979009 [PubMed - indexed for MEDLINE]

OBJECTIVE: The investigation aimed at determining the effectiveness of pulsed electromagnetic fields (PEMF) in the treatment of osteoarthritis (OA) of the knee by conducting a randomized, double-blind, placebo-controlled clinical trial. **DESIGN:** The trial consisted of 2h daily treatment 5 days per week for 6 weeks in 83 patients with knee OA. Patient evaluations were done at baseline and after 2 and 6 weeks of treatment. A follow-up evaluation was done 6 weeks after treatment. Activities of daily living (ADL), pain and stiffness were evaluated using the Western Ontario and McMaster Universities (WOMAC) questionnaire. **RESULTS:** Within group analysis revealed a significant improvement in ADL, stiffness and pain in the PEMF-treated group at all evaluations. In the control group there was no effect on ADL after 2 weeks and a weak significance was seen after 6 and 12 weeks. Significant effects were seen on pain at all evaluations and on stiffness after 6 and 12 weeks. Between group analysis did not reveal significant improvements over time. Analysis of ADL score for the PEMF-treated group revealed a significant correlation between less improvement and increasing age. Analysis of patients <65 years using between group analysis revealed a significant improvement for stiffness on treated knee after 2 weeks, but this effect was not observed for ADL and pain. **CONCLUSIONS:** Applying between group analysis we were unable to demonstrate a beneficial symptomatic effect of PEMF in the treatment of knee OA in all patients. However, in patients <65 years of age there is significant and beneficial effect of treatment related to stiffness.

8.6 Effects of Pulsed Electromagnetic Fields on Articular Hyaline Cartilage: Review of Experimental and Clinical Studies

[Fini M, Giavaresi G, Carpi A, Nicolini A, Setti S, Giardino R.
Experimental Surgery Department, Research Institute Codivilla-Putti-Rizzoli, Orthopedic Institute, via di Barbiano 1/10, 40136 Bologna, Italy.
PMID: 16084055 [PubMed - indexed for MEDLINE]

Osteoarthritis (OA) is the most common disorder of the musculoskeletal system and is a consequence of mechanical and biological events that destabilize tissue homeostasis in articular joints. Controlling chondrocyte death and apoptosis, function, response to anabolic and catabolic stimuli, matrix synthesis or degradation and inflammation is the most important target of potential chondroprotective treatment, aimed to retard or stabilize the progression of OA. Although many drugs or substances have been recently introduced for the treatment of OA, the majority of them relieve pain and increase function, but do not modify the complex pathological processes that occur in these tissues. Pulsed electromagnetic fields (PEMFs) have a number of well-documented physiological effects on cells and tissues including the upregulation of gene expression of members of the transforming growth factor beta super family, the increase in glycosaminoglycan levels, and an anti-inflammatory action. Therefore, there is a strong rationale supporting the *in vivo* use of biophysical stimulation with PEMFs for the treatment of OA. In the present paper some recent experimental *in vitro* and *in vivo* data on the effect of PEMFs on articular cartilage were reviewed. These data strongly support the clinical use of PEMFs in OA patients.

8.7 The Effect of Pulsed Electromagnetic Fields in the Treatment of Cervical Osteoarthritis: A Randomized, Double-Blind, Sham-Controlled Trial

[Sutbeyaz ST, Sezer N, Koseoglu BF.
Ankara Physical Medicine and Rehabilitation Education and Research Hospital, Turk ocagi S No: 3 Sihhiye, Ankara, Turkey.
PMID: 15986086 [PubMed - indexed for MEDLINE]

The purpose of this study was to evaluate the effect of electromagnetic field therapy (PEMF) on pain, range of motion (ROM) and functional status in patients with cervical osteoarthritis (COA).

Thirty-four patients with COA were included in a randomized, double-blind study. PEMF was administered to the whole body using a mat 1.8 x 0.6 m in size. During the treatment, the patients lay on the mat for 30 min per session, twice a day for 3 weeks. Pain levels in the PEMF group decreased significantly after therapy ($p < 0.001$), but no change was observed in the placebo group. The active ROM, paravertebral muscle spasm and neck pain and disability scale (NPDS) scores improved significantly after PEMF therapy ($p < 0.001$) but no change was observed in the sham group. The results of this study are promising, in that PEMF treatment may offer a potential therapeutic adjunct to current COA therapies in the future.

8.8 Optimization Of Pulsed Electromagnetic Field Therapy For Management Of Arthritis In Rats

[Kumar VS, Kumar DA, Kalaivani K, Gangadharan AC, Raju KV, Thejomoorthy P, Manohar BM, Puvanakrishnan R. - Department of Pharmacology and Toxicology, Madras Veterinary College, Vepery, Chennai, India.

PMID: 15887257 [PubMed - indexed for MEDLINE]

Studies were undertaken to find out the effects of low frequency pulsed electromagnetic field (PEMF) in adjuvant induced arthritis (AIA) in rats, a widely used model for screening potential therapies for rheumatoid arthritis (RA). AIA was induced by an intradermal injection of a suspension of heat killed Mycobacterium tuberculosis (500 mug/0.1 ml) into the right hind paw of male Wistar rats. This resulted in swelling, loss of body weight, increase in paw volume as well as the activity of lysosomal enzymes viz., acid phosphatase, cathepsin D, and beta-glucuronidase and significant radiological and histological changes. PEMF therapy for arthritis involved optimization of three significant factors, viz., frequency, intensity, and duration; and the waveform used is sinusoidal. The use of factorial design in lieu of conventional method resulted in the development of an ideal combination of these factors. PEMF was applied using a Fransleau-Braunbeck coil system. A magnetic field of 5 Hz x 4 muT x 90 min was found to be optimal in lowering the paw edema volume and decreasing the activity of lysosomal enzymes. Soft tissue swelling was shown to be reduced as evidenced by radiology. Histological studies confirmed reduction in inflammatory cells infiltration, hyperplasia, and hypertrophy of cells lining synovial membrane. PEMF was also shown to have a membrane stabilizing action by significantly inhibiting the rate of release of beta-glucuronidase from lysosomal rich and sub-cellular fractions. The results indicated that PEMF could be developed as a potential therapy in the treatment of arthritis in humans. (c) 2005 Wiley-Liss, Inc.

9 Testimonials (Arthritis)

Mrs CS - St Leonards on Sea

I have been suffering from Arthritis in my legs, hips and spine for around twenty years and have had Acupuncture and Chinese herbal treatments in an attempt to keep it at bay.

These two treatments helped a little but did not give me any lasting relief from the pain and discomfort that I was experiencing.

My daughter, who is a Reflexology therapist, suggested that I try Viofor magnetic therapy equipment and I am happy to report the following:

After the first treatment I experienced an increase in pain, which lasted for two days, however the treatment manual mentioned that this might happen and I was prepared for it.

Now after just three treatments on the equipment I am happy to say that the pain and discomfort have reduced by 80% and my mobility has been much improved.

I will continue to use this wonderful equipment and would recommend it to anyone who suffers from arthritis.

Mrs J P – Lancashire

Three years ago I was diagnosed with Rheumatoid Arthritis and in June 2004, after trying pain and inflammation inhibitors, supplements and other types of therapy, I started to use the Viofor Magnetic Stimulation bed.

The arthritis was badly affecting my feet, knees, elbows and hands but after only a few sessions on the bed the pain, swelling and stiffness in all areas decreased.

For the last two months I feel wonderful and have been almost pain free.

I have nothing but gratitude and thanks that such marvellously effective equipment exists.

I recommend this therapy to anyone suffering with Rheumatoid Arthritis without hesitation.

GC - Lancashire

Before telling my story I should disclose that my son is a director of Medica Health

I am over 80 years of age and had a triple by-pass eight years ago. One year ago I developed severe pains in my leg which stopped me walking more than 20 yards. From that I then developed arthritis of the hip which exacerbated the condition. The doctors diagnosed hardening of the arteries in my leg and subsequent tests showed I had less than 30% blood flow getting to my lower leg. I got a Viofor system at home and used it twice a week and within a few weeks I was totally pain free. I can now walk up to 5 miles and 15 months later have no pain whatsoever. I think probably I would have been in a wheelchair without the viofor system.

Rod Seaden - Gloucestershire

The drugs kept my arthritis under control, but I started to get pancreatitis every 6 weeks or so. It was absolute agony. So many times I've been doubled up in pain and rushed into hospital in an ambulance. Having been in pharmaceuticals all my life, I was probably rather rude to him. I remember mentioning pigs and flying! But, thank goodness, I gave it a try. My arthritis has stabilised now – and it even helps with my sciatica. I decided to buy my own bed, so I can keep my arthritis under control. A session can take as little as 20 minutes a day so, obviously, it's not a bed you sleep on. I'm a real convert – and have already recommended it to so many other people. It's changed my life.

David Legg - Lancashire

I decided to try it...more out of hope than any real conviction. But I knew the alternative would be a future of heavy medication. After the fifth week, I noticed a small improvement. Two weeks after that, the effects were immediately noticeable. The swelling had gone down, the movement was coming back and I wasn't getting any pain. Since that first set of treatments, I haven't taken a single tablet. And the good news is that the beds are now available to anyone in the UK through Medica Health. Just give it a go – you've got nothing to lose.

10 Contraindications

Based on over 12,000 case studies on the use of PEMF and daily use in a clinical and home environment, there is no information in literature regarding contraindications to magnetostimulation. However, in view of the comparatively short period of existence of magnetostimulation in relation to magnetotherapy, the contraindications should be the same as in case of magnetotherapy ie:

- pregnancy
- presence of electronic implants
- active neoplastic disease
- active tuberculosis of the lungs
- bleeding from the alimentary tract
- serious infections of a viral, bacterial and mycotic origin
- conditions after organ transplants

Side effects, which may occur due to magnetostimulation

Until now, no serious side effects of magnetostimulation have been reported. The following effects might occur temporarily:

- tingling sensation
- numbing sensation
- warmth sensation
- sleep disorders, particularly in elderly people
- irritation
- concentration disorders
- temporary intensification of pain

In conclusion, it should be stated that the application of variable magnetic fields is safe and progress of experimental and clinical knowledge will in all likelihood result in reduction of the number of contraindications.

11 Frequently Asked Questions (by patients)

Q Is the equipment safe?

A Yes, it's very safe.

Up until the year 2001, over 10,000 people had been evaluated whilst using Viofor equipment with no evidence of side effects.

Q Is the equipment easy to use?

A The equipment is very easy to use.

The Classic system can be up and running in minutes, as the manual is very comprehensive and the control unit has pictorial symbols.

With the Professional versions, again the manuals are comprehensive, though we offer training sessions (two days – which can be at your premises or ours) if required.

Fully trained staff are always on hand at our offices to give you assistance should you require it – we are only a phone call away.

Q Can I treat myself on the equipment?

A Yes, you can.

Because the equipment is so easy to use, any adult can use it. It is not necessary to be medically trained in order to use the equipment.

Each set comes with a full instruction manual and we include guidelines on settings for various conditions.

Q What happens when I go on the equipment - what will I feel?

A Most people feel nothing more than slight warmth from the equipment. Occasionally, minor tingling sensations are felt in the extremities or other areas of the body.

People with painful conditions can have a slight increase in the amount of pain that they feel, but this will only last for one to three sessions. After this the analgesic effect of the equipment starts to work and pain is very much lessened.

Many people report a feeling of well-being after just a few treatments

Q How long before I start to get benefit from the equipment?

A This will depend upon which condition is being treated.

Age and fitness also play a part in how quickly you will react to treatments.

Arthritis

With arthritic conditions you can expect to feel much less pain and have more movement after six weeks or so, but initial pain reduction will start after just two to three treatments.

Pain and Sports injuries

Painful areas (back pain for instance) and sports injuries all respond very quickly to treatment with Viofor equipment – even long term pain conditions.

Chronic ailments

Chronic ailments such as MS and Parkinson's will normally respond well, with varying times and levels of relief, depending upon the severity of the condition before treatment commences.

Osteoporosis

Osteoporosis sufferers will normally start to have increased bone density after six to 12 months.

Cholesterol and high blood pressure

High cholesterol levels will normally be lowered after three to four months and high blood pressure levels normally drop significantly after one to two months.

After these periods blood should be tested by your doctor to see if is appropriate to reduce drug intake.

Other conditions

Many other conditions, not listed, respond very well to Viofor magnetostimulation.

If you would to know whether a condition - not listed - can be treated, please send an email or telephone us and we will give you an answer as soon as possible.

Q Can I continue to take medication whilst using the equipment?

A Yes. Viofor equipment is designed to be used as an adjunctive therapy to normal medical procedures, so we recommend that you continue to use prescribed medications and follow the advice of your doctor /consultant.

If you are chronically ill, we recommend that you inform your medical practitioner that you will be using magnetostimulation equipment.

Q How does the equipment work?

A To put it very simply, Viofor magnetostimulation equipment encourages your body cells to return to peak condition. The equipment does this by improving the electrical state, blood supply and oxygen to cells, which in turn allows them to detoxify, regenerate and reproduce. When your body cells are in peak condition, all your bodily systems start to work as well as they possibly can.

Q Why is Viofor the best equipment in this area?

A The professors that designed the Viofor JPS magnetostimulation equipment are at the very top of their field of magnetic therapy. They have spent more than fifteen years developing the equipment to the standard that it is today. Tens of thousands of people have been treated successfully with Viofor equipment in hospitals and clinics across Europe .

The Viofor JPS System uses the most efficient complex wave patterns (patented technology) at low induction levels to produce maximum healing benefits.

This technology avoids most problems associated with older type magnetic field equipment, which uses high induction level systems that the body can soon get used to.

12 Institutions Possessing and/or Using Viofor JPS System

HUNGARY

1. OSEI National Institut for Sport Medicine; Budapest; Fiotherapy Hospital
2. Institut for Traumatology; Hungary; Budapest; Hospital
3. Magyar Imre Hospital; Hungary; Ajka; Hospital
4. Karolyi Sandor Hospital; Hungary; Budapest; Hospital
5. MH HEMORI (Army); Hungary; Heviz; Rehabilitaton center
6. HOTEL AQUA; Hungary; Heviz; Rehabilitaton center
7. Thermal Hotel Heviz; Hungary; Heviz; Rehabilitaton center
8. NUPI National Institut for New Generation of Sport; Hungary; Budapest; Research
9. Hungarian Sport Training Camp; Hungary; Tata; Sport Medicine
10. Hungarian Customs Police Recreation Centre; Hungary; Budapest; Rehabilitaton center
11. Bodnar Klinika; Hungary; Budapest; Rehabilitaton center
12. HONDA Good Health's House; Hungary; Budapest; Rehabilitaton center
13. MEDICOR Employee health center; Hungary; Budapest; Employee health center
14. SUGO-MED Employee health center; Hungary; Baja; Employee health center
15. OXIVIT Employee health center; Hungary; Budapest; Employee health center
16. SPORT-KA Bt; Hungary; Kisszallas; Family&Sport Medicine
17. Pusztai Egeszsegugyi Bt; Hungary; Koszeg
18. MANUAL-MED Bt; Hungary; Budapest; Rehabilitaton center
19. MAREK-MEDK Kft; Hungary; Gyula; Surgery
20. MEDICUS 2000; Hungary; Budapest; Neuropsychiatry
21. SIKKES Bt; Hungary; Budapest; Rehabilitaton center
22. FOTOFIL Bt; Hungary; Paks; Rehabilitaton center
23. Bekesi GYMNASTICS; Hungary; Szeged; Gymnastics
24. MED-AURA Bt; Hungary; Budapest; Acupuncture
25. DOLOMIT-MED; Hungary; Budapest; Clinic of Orthopedy

CANADA

1. Bridgewater Apartman Sp; Canada; B-water; Sport medicine

FRANCE

(List unavailable from country distributor)

GERMANY

(List unavailable from country distributor)

THE NETHERLANDS

(List unavailable from country distributor)

BELGIUM

(List unavailable from country distributor)

MEXICO

1. National Footbal Team; Mexico; Mexico D.C.
2. Alternative Health Centre; Mexico; Mexico D.C. Doctor
3. Cortec Sp; Mexico; Mexico D.C.

AUSTRIA

1. Prof. Dr. Dominik Uehlinger, MD Division of Nephrology and Hypertension
2. Allgemeine Unfallversicherungsanstalt
3. Rehabilitationszentrum Tobelbad
4. Therapiezentrum St. Radegund
5. Caritas Institut St. Pius

RUSSIAN FEDERATION

1. National Institut of Medicine and Stomatology in Moscow
2. Main Military Hospital of National Defence Ministry named after Budrenko in Moscow
3. Central Military Hospital named after Wiszniewski in Moscow
4. National Pediatric Rehabilitation Center "Dietstwo" in Moscow
5. Russian Combatant Rehabilitation Center in Moscow
6. Circus named after J. nikulin in Moscow
7. Regional Hospital in Smolensk

8. Medical Cosmetology and Health Center of Russian Ministry of Health in Kazan
9. Regional Scientific and Research Cardiology Institute in Moscow (MONIKI)
10. Football team CSKA Moscow
11. Hockey Club "Akbars" Kazan
12. Hockey Club "Metalurg" Nowokuznieck (Siberia)
13. Spa & Sanatory "Korall" in Soczi
14. Clinic No20 in Moscow
15. Disabled Children Rehabilitation Center of Russian Ministry of Russian Ministry of Social Care in Reutow

BELARUS REPUBLIC

1. National Sports Medicine Institute in Minsk
2. Olympic Preparation Center „Raubiczyn” near Minsk
3. Olympic Preparation Center „Stajki” near Minsk
4. Sport Shooting Federation of Belarus Ministry of Sport
5. Football Club (I ligue) „Torpedo” Minsk
6. Regional Sports Clinic in Grodno
7. Regional Sports Clinic in Gomle
8. Football Club (I ligue) „Dynamo” Minsk

LATVIA

1. National Hospital „Gajlezers” Riga
2. Latvian Ministry of Transport Clinic Riga
3. Local Clinic No3 in Riga
4. General Hospital in Daugawpilsu
5. Veterinary Clinic „Kalnberzs” in Riga
6. Medical Center of prof. Detlavs in Riga

MOLDAVA

1. Football Club (I ligue) „Szeryf” Tyraspol

UKRAINE

1. Scientific and Research Center of Physical Culture and Sports Institute in Kiev
2. Medical Center SA „LwiwTransGaz” in Lwow
3. Medical Center in Kiev
4. Football Club SA „LwiwTransGaz”

CESKA REPUBLIKA

1. Galatea Brno a.s- REHABILITACE
2. Nemocnice Vimperk o.p.s.REHABILITACE
3. Nemocnice V Bilivici o.p. Bilowec, Rehabilitace
4. Hamzova Odborna Lecebna pro Deti i Dospole Chrudim
5. Nemocnice Milssrdnych bratri Vizovice
6. Chirurgie Sportovni Medicina Ostrava-Marianske Hory
7. Detsky denni rehabilitacni stacionar Hradec Kralove
8. Ramis Medica s.r.o., Ostrava-Privoz
9. Regionalni organizace Unie ROSKA v CR , Ostrava
10. Mestska Nemocnice ODRY , Odry
11. Mestska Nemocnice Prerov, Prerov
12. Okresni organizace SPMP CR Prerov, Prerov
13. Soukroma Rehabilitace, Marianske Lazne
14. Immunologie a alergologie –Mudr. Lichnovsky Jan Ostrava
15. STR Stredisko Reflexni Terapie Mudr. Milan Vesley , Letnany

POLAND

I. REHABILITACJA

- 1 Centrum Rehabilitacji SZP ZOZ Oddzial Urazowo-Ortopedyczny w Konstancinie
- 2 Wojewodzki Ośrodek Reumatologiczno-Rehabilitacyjny Uzdrowisko Goczałkowice Zdrój
- 3 Krakowskie Centrum Rehabilitacji
- 4 Gliwicki Ośrodek Adaptacyjno-Rehabilitacyjny dla Dzieci i Młodzieży Niepełnosprawnej Gliwice
- 5 Ośrodek Leczniczko-Rehabilitacyjny dla Dzieci Kamienna
- 6 Ośrodek Pomocy Społecznej Ośrodek Rehabilitacji Terapeutycznej dla Dzieci i Młodzieży Czechowice Dziedzice

- 7 Ośrodek Rehabilitacyjny Stwardnienia Rozsianego-Siemianowice Śląskie
- 8 Polskie Stowarzyszenie na Rzecz Dzieci z Upośledzeniem Umysłowym.
Ośrodek Rehabilitacyjno-Wychowawczy Rzeszów
- 9 Polskie Stowarzyszenie na Rzecz Osób z Upośledzeniem Umysłowym.
Ośrodek Rehabilitacyjno-Edukacyjno-Wychowawczy Zamość
- 10 Przychodnia Rehabilitacyjna SPZOZ Ruda Śląska
- 11 Samodzielny Ośrodek Rehabilitacyjno-Oświatowy dla dzieci Niepełnosprawnych.
Centrum Rozwoju Dziecka Katowice
- 12 SP ZOZ Górnos Śląskie Centrum Rehabilitacji "REPTY" Tarnowskie Góry
- 13 Specjalistyczny Ośrodek Rehabilitacji Leczniczej UNIMEO Sp. zo.o.
- 14 SPZOZ Ośrodek Rehabilitacyjny Suwałki
- 15 Zakład Rehabilitacyjno-Pielęgnacyjny Ostrowiec Świętokrzyski
- 16 Centrum Rehabilitacji SALVEO w Bytomiu
- 17 Wojewódzki Ośrodek Rehabilitacji Kochcice
- 18 Ośrodek Rehabilitacyjno-Edukacyjny dla Dzieci Niepełnosprawnych Rusinowice
- 19 Europejska Klinika Rehabilitacji VICTORIA Sława
- 20 Centrum Rehabilitacyjne Gierałtowice
- 21 Centrum Rehabilitacji i Fizykoterapii Rawa Mazowiecka

II STOMATOLOGIA

- 1 Pomorska Akademia Medyczna w Szczecinie - Zakład Propedeutyki i Fizykoterapii
Stomatologicznej, Zakład Chirurgii Stomatologicznej
- 2 Wojewódzkie Centrum Stomatologii w Warszawie
- 3 Oddział Stomatologii Wydziału Zabrzeńskiego Śląskiej Akademii Medycznej , Klinika Chirurgii
Szczękowej Zabrze
- 4 Gabinet Stomatologiczny w Lesznie
- 5 Prywatny Gabinet Stomatologiczny w Łęczycy
- 6 Prywatny Gabinet Stomatologiczny w Myszkowie
- 7 NZOZ ORTO-DENT w Zawierciu

III SANATORIA

- 1 Dom Sanatoryjno Wypoczynkowy "Rzymianka" Rabka
- 2 Hotel Keszycza Leśna
- 3 Kolejowy Szpital Uzdrawiskowy " Kolejarz" Sp. z o.o.
- 4 NZOZ Prewentorium Uzdrawiskowe PIAST Iwonicz Zdrój
- 5 Ośrodek Rehabilitacyjno-Wypoczynkowy Mielno
- 6 Ośrodek Wczasowy "Na Klifie" Jarosławiec
- 7 Pensjonat Villa Romantica Szklarska Poręba
- 8 Prywatna Klinika Rehabilitacyjna Krojanty Dwór
- 9 PUTR Wodnik Ośrodek Leśna Polana Ustronie Morskie
- 10 Sanatorium Uzdrawiskowe H.Cegielski Dąbki
- 11 Sanatorium Uzdrawiskowe Metalowiec Inowrocław
- 12 Sanatorium Uzdrawiskowe SAN HSW PPU Lasowiak Sp. zo.o. Kołobrzeg
- 13 Solanki Uzdrawisko Inowrocław Sp. z o.o.
- 14 Szpital Uzdrawiskowy Kolejarz Sp. z o.o. Kołobrzeg
- 15 Uzdrawisko Busko Zdrój S.A.
- 16 Uzdrawisko Goczałkowice-Zdrój Wojskowy Ośrodek Reumatologiczno-Rehabilitacyjny
- 17 Zakład Leczniczo-Wypoczynkowy "IKAR" Kołobrzeg
- 18 ZOZ Sanatorium MSWiA Kołobrzeg
- 19 ZOZ Sanatorium MSWiA Kudowa Zdrój
- 20 Sanatorium Uzdrawiskowe Muszyna Instytut Zdrowia Człowieka NZOZ
- 21 22 Wojskowy Szpital Uzdrawiskowo-Rehabilitacyjny SP ZOZ w Ciechocinku

IV DOMY POMOCY SPOŁECZNEJ

- 1 Centrum Pomocy Socjalnej Sokółów Podlaski
- 2 Dom Dziecka Nr 2 Białystok
- 3 Zakład Terapii Zajęciowej, Urząd Gminy Piaski
- 4 Dom Pomocy Społecznej Czarnowąsy
- 5 Dom Pomocy Społecznej dla Dzieci Pruszków
- 6 Dom Pomocy Społecznej Kobyła Góra
- 7 Dom Pomocy Społecznej Myślibórz
- 8 Dom Pomocy Społecznej Poznań

- 9 Dom Pomocy Społecznej Siedlce
- 10 Dom Pomocy Społecznej Dla Dzieci Strumień
- 11 Dom Pomocy Społecznej Wrocław
- 12 Gminno - Miejskie Centrum Pomocy "Wiara-Nadzieja-Miłość" Odolanów
- 13 Ośrodek Dla Niepełnosprawnych Mikołów
- 14 Ośrodek Terapii Nerwic dla Dzieci i Młodzieży Oddział Leczenia Zaburzeń-Orzesze
- 15 Ośrodek Pomocy Społecznej Kościan
- 16 Ośrodek Rehabilitacyjno-Wychowawczy Piotrków Trybunalski
- 17 SP ZOZ Zakład Pielęgnacyjno-Opiekuńczy Swinoujście
- 18 Środowiskowy Dom Samopomocy Żarki
- 19 Dom Pomocy Społecznej Pszczyna
- 20 Dom Pomocy Społecznej w Wałbrzychu Jednostka Organizacyjna Powiatu Wałbrzyskiego
- 21 Dom Pomocy Społecznej w Krzyżanowicach
- 22 Dom Artystów Weteranów Scen Polskich Konstancin Jeziorna
- 22 Ośrodek Opiekuńczo Rehabilitacyjny dla Dzieci Niepełnosprawnych w Skierniowicach

V FUNDACJE

- 1 Fundacja Rehabilitacyjno- Kardiologiczna Warszawa-Anin
- 2 Stowarzyszenie Rodziców Dzieci Niepełnosprawnych ISKRA Warszawa
- 3 Stowarzyszenie Osób Niepełnosprawnych i ich Przyjaciół w Nysie
- 4 Fundacja Sport i Zdrowie przy NSZZ Solidarność WZK Przyjaźń Dąbrowa Górnicza
- 5 Fundacja "DOM" Opole
- 6 Stalowolskie Towarzystwo Stwardnienia Rozsianego
- 7 Chocianowskie Stowarzyszenie Pomocy Dzieciom i Dorosłym
- 8 Polskie Stowarzyszenie na Rzecz Osób z Upośledzeniem Umysłowym Zakopane
- 9 Fundacja "Sprawni Inaczej" Gdańsk
- 10 Stowarzyszenie Osób Niepełnosprawnych "SON" Gliwice
- 11 PCK Nowe Miasto Lubawskie Zarząd Rejonowy
- 12 Kieleckie Stowarzyszenie Chorych na SM
- 13 Spółdzielnia Inwalidów Metal-Incar Warszawa
- 14 Spółdzielnia Inwalidów Rozwój Kłobuck
- 15 Spółdzielnia Inwalidów SPAMEL Twardogóra
- 16 Stowarzyszenie Ostrowianie Dzieciom Specjalnej Troski Ostrów Wielkopolski
- 17 Stowarzyszenie "Otwarte Drzwi" Warszawa
- 18 Stowarzyszenie Chorych na Stwardnienie Rozsiane i Osób Niepełnosprawnych -Suwałki
- 19 Stowarzyszenie Na Rzecz Dzieci z Upośledzeniem Umysłowym "PERSONA" Legnica
- 20 Stowarzyszenie Rodziców i Opiekunów Dzieci Niepełnosprawnych "Dobre Ręce" Rawa Mazowiecka
- 21 Zarząd Kieleckiego Stowarzyszenia Chorych na Stwardnienie Rozsiane Kielce
- 22 Stowarzyszenie na rzecz Dzieci Niepełnosprawnych i ich Rodziców "Siła Nadziei" Ciechanów
- 23 Polskie Stowarzyszenie na Rzecz Osób Upośledzonych Koło w Pszczynie
- 24 Polskie Stowarzyszenie na Rzecz Osób z Upośledzeniem Umysłowym Mielęcin
- 25 Fundacja Pracownicza PRO - ECO Łaziska Górne
- 26 Stowarzyszenie na Rzecz Wspierania Zrównoważonego Rozwoju Powiatu Sieradzkiego, Śląskiego - Środa Śląska
- 27 Śląskie Stowarzyszenie Pomocy Dzieciom Specjalnej Troski i Osobom z Upośledzeniem Umysłowym Odrodzenie Katowice
- 28 Fundacja Na Rzecz Dzieci - Miasteczko Śląskie
- 29 Polskie Stowarzyszenie Na Rzecz Osób z Upośledzeniem Umysłowym Aleksandrów Łódzki
- 30 Polskie Stowarzyszenie Na Rzecz Osób z Upośledzeniem Umysłowym Koło w Wałbrzychu
- 31 Stowarzyszenie Osób Niepełnosprawnych i ich Przyjaciół w Nysie
- 32 Stowarzyszenie Osób Niepełnosprawnych Gliwice
- 33 Stowarzyszenie Pomocy Ludziom ze Schorzeniami Wątroby, Promocja Zdrowia- Szczecin
- 34 Stowarzyszenie Rodziców Dzieci Niepełnosprawnych Ruchowo Ośrodek Rehabilitacji Leżajsk
- 35 Towarzystwo Rodziców Dzieci Specjalnej Troski w Brodnicy Warsztaty Terapii Zajęciowej
- 36 Fundacja POLONIA Warszawa
- 37 Fundacja Pomocy Dzieciom Żywiec
- 38 Fundacja Postępu w Otolaryngologii i Leczeniu Głuchoty im. prof. Bochenka Warszawa
- 39 Fundacja "POLITRAUMA" przy Wojewódzkim Szpitalu Specjalistycznym nr 5 im. Św. Barbary, Oddział Rehabilitacyjny - Sosnowiec
- 40 Fundacja "Przyjaciółka" Warszawa

- 41 Fundacja "Wielkiej Orkiestry Świątecznej Pomocy" Warszawa
- 42 Fundacja "POLSAT" Warszawa
- 43 Fundacja Dom Rodzinny i Rehabilitacji Dzieci z Porażeniem Mózgowym Opole
- 44 Fundacja "Dzieciom Zdażyć z Pomocą" - Warszawa
- 45 Fundacja Humanitarna "Nadzieja" Nowy Staw
- 46 Fundacja Kresowa "Semper Fidelis" Wrocław
- 47 Związek Inwalidów Wojennych RP Warszawa
- 48 Fundacja Ochrony Zdrowia Dąbrowa Górnicza
- 49 Miejski Ośrodek Pomocy Rodzinie Białystok
- 50 Krajowe Towarzystwo Autyzmu O/Łódź Centrum Rehabilitacyjne "NAVICULA"
- 51 Fundacja Sprawni Inaczej Gdańsk

VI SZKOŁY

- 1 Akademia Medyczna Białystok
- 2 Akademia Medyczna Lublin Zakład Biofizyki
- 3 Akademia Rolnicza Wydział Biotechnologii i Hodowli Zwierząt Katedra Hodowli Ptaków Użytkowych i Ozdobnych Szczecin
- 4 Akademia Wychowania Fizycznego Warszawa
- 5 SGGW Wydział Medycyny Weterynaryjnej Katedra Rozrodu Zwierząt Warszawa
- 6 AWF Wrocław Zakład Fizykoterapii, Masażu i Balneoklimatologii Wydziału Fizjoterapii
- 7 Olsztyńska Szkoła Wyższa im. Józefa Rusieckiego Olsztyn
- 8 Pomorska Akademia Medyczna Szczecin
- 9 Uniwersytet Szczeciński -Instytut Kultury Fizycznej
- 10 Wyższa Szkoła Inżynierii Dentystycznej Ustroń
- 11 Zespół Szkół Specjalnych Nr 5 Dąbrowa Górnicza
- 12 Zespół Szkół Specjalnych Nr 63 Warszawa
- 13 Ośrodek Rehabilitacyjno-Edukacyjno-Wychowawczy Rzeszów
- 14 Basen MOCZYDŁO Warszawa
- 15 Medyczne Studium Zawodowe nr 2 Szczecin

VII LECZNICTWO ZAMKNIĘTE

- 1 Wojewódzkie Centrum Pediatrii KUBALONKA w Istebnej Wisła
- 2 Centralny Szpital Kliniczny WAM Klinika Nefrologii ze Stacją Analiz Warszawa
- 3 Centrum Leczenia Oparzeń Siemianowice Śląskie
- 4 Centrum Pediatrii im.Jana Pawła II w Sosnowcu
- 5 SP Wojewódzki Szpital Chirurgii Urazowej dr J.Daaba Piekary Śląskie
- 6 II Oddział Kardiochirurgii SP Szpital Kliniczny Nr 7 Górnośląskiego Centrum Medycznego Śląskiej Akademii Medycznej w Katowicach
- 7 SZP ZOZ im.dr Psarskiego Ostrołęka
- 8 Szpital MSWiA w Katowicach
- 9 Szpital Specjalistyczny im. Babińskiego Kraków
- 10 Szpital ZOZ Pszczyna
- 11 Wojewódzki Szpital Dziecięcy im. prof.Brudzińskiego SPZOZ - Dziekanów Leśny
- 12 Wojewódzki Szpital im. J.Babińskiego Wrocław
- 13 Wojewódzki Szpital Specjalistyczny im. św. Barbary Sosnowiec
- 14 Wojewódzki Szpital Specjalistyczny Nr 2 Jastrzębie Zdrój
- 15 Zespół Szpitali Miejskich w Częstochowie
- 16 20 Wojskowy-Szpital Uzdrowsko-Rehabilitacyjny Krynica Zdrój
- 17 Instytut Kardiologii Klinika i Zakład Rehabilitacji Kardiologicznej i Elektrykardiologii Nieinwazyjnej Warszawa
- 18 Prywatne Centrum Chirurgii Plastycznej w Szczecinie
- 19 Szpital Specjalistyczny nr 1 Oddział Reumatologii Bytom
- 20 SP ZOZ Ośrodek Leczenia Chorób Układu Oddechowego u Dzieci Kargowa

VIII LECZNICTWO OTWARTE

- 1 Miejskie Centrum Medyczne Sp. z o.o. LIBIAŻ
- 2 SPZOZ Stalowa Wola
- 3 SP ZOZ Miejski Ośrodek Zdrowia w Zielonce
- 4 Regionalne Centrum Krwiodawstwa i Krwiolecznictwa Szczecin
- 5 Zakład Opiekuńczo - Lecznicy Gliwice
- 6 Dom Opiekuńczo-Lecznicy Przasnysz
- 7 Wojskowa Specjalistyczna Przychodnia Lekarska SPZOZ Stargard Szczeciński
- 8 SP ZOZ Zakład Pielęgnacyjno - Opiekuńczy Świnoujście
- 9 SORO Centrum Rozwoju Dziecka Katowice Ośrodek Rehabilitacyjny Dzieci Niepełnosprawnych
- 10 SP Z ZOZ Zarząd Służby Zdrowia MSWiA Białystok
- 11 SP ZOZ Przeciszów
- 12 NZOZ Poradnia Leczenia Bólu Przewlekłego Tychy
- 13 NZOZ ORTO-DENT Zawiercie
- 14 NZOZ Poradnia Medycyny Rodzinnej Zdzieszowice
- 15 SPZOZ w Leżajsku
- 16 NZOZ LANCET Grębocice
- 17 Publiczny Zakład Lecznictwa Podstawowego Kobiór
- 18 NZOZ LUMIS Żeliszew
- 19 ZOZ w Kolbuszowej
- 20 SP ZOZ Police
- 21 NZOZ Przychodnia Rodzinna Ścinawa Średnia
- 22 NZOZ SANUS Jaworzyna Śląska
- 23 ZOZ w Łąncucie
- 24 Centrum Medyczne Medyk Oleśnica
- 25 NZOZ "Lekarz" Annopol
- 26 Prywatny Zakład Opieki Zdrowotnej INTERMEDICA Cewia
- 27 NZOZ Przychodnia "Na Trzynieckiej" Chorzów
- 28 NZOZ Centrum Usług Pielęgniarskich Chorzów
- 29 Specjalistyczna Przychodnia Lekarska dla Pracowników Wojska SPZOZ- Warszawa
- 30 SP GZOZ w Nowym Wiśniczu

IX INSTYTUCJE KOŚCIELNE

- 1 LIV Prywatne Liceum Ogólnokształcące Sióstr Nazaretanek Warszawa
- 2 Caritas Diecezji Płockiej
- 3 Caritas Diecezji Gliwickiej 2001
- 4 Dom Pomocy Społecznej Zgromadzenia Sióstr Miłosierdzia Przasnysz
- 5 Caritas Diecezji Sandomierskiej Centrum Pielęgniarstwa Środowiskowo-Rodzinnego Tarnobrzeg
- 6 Specjalny Ośrodek Wychowawczy Mińsk Mazowiecki
- 7 Stacja Opieki Caritas Archidiecezji Krakowskiej im. Brata Alberta Alojzego Kosiby - Wieliczka
- 8 Zakład Opiekuńczo-Lecznicy Zgromadzenie C.M.B.B."Serafinki" Oświęcim
- 9 Caritas Polska Warszawa
- 10 Dom Pomocy Społecznej Zakon Bonifratrów Cieszyn
- 11 Caritas Diecezji Rzeszowskiej O/Jasło
- 12 Dom Opieki Św. Jadwigi Śląskiej Caritas Archidiecezji Wrocławskiej - Henryków
- 13 Klasztor Ojców Franciszkanów Teresin, Niepokalanów
- 14 Caritas Diecezji Krakowskiej O/Zakopane

X INNE

- 1 Alfa Fruit Sp. z o.o. Przeclaw
- 2 ZAMED Zakład Aparatury Medycznej Kołobrzeg
- 3 Zakład Specjalny Ochrony Środowiska Ekosfera Częstochowa
- 4 Przedsiębiorstwo Farmaceutyczne APEXIM S.A. Radwanice
- 5 Redakcja i Administracja Tygodnika Niedziela Częstochowa
- 6 Przedsiębiorstwo Wyrobów Cukierniczych Odra S.A. Brzeg
- 7 Elektrociepłownia Tychy S.A.
- 8 Wojskowy Instytut Medycyny Lotniczej Warszawa
- 9 Tankpol Sp. zo.o. Szczucin
- 10 Gliwicka Spółka Węglowa S.A.Kopalnia Węgla Kamiennego "Knurów"
- 11 METAL UNION Sp.z o.o. Częstochowa
- 12 Zakład Energetyczny Płock S.A.
- 13 Instytut Mechaniki Sp. z o.o. Miłoszyce

14 INTER-TEAM Sp. z o.o. Warszawa

15 MOSTY Katowice Sp. z o.o.

16 Centrum Ekologiczne Licencyjnych Technologii CELT Sp. z o.o. Katowice

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