

## **Atherosclerosis – Obliterating Vascular Disease**

Vopr Kurortol Fizioter Lech Fiz Kult. 1998 Jul-Aug;(4):31-6.

### **[The combined action of infrared radiation and permanent and alternating magnetic fields in experimental atherosclerosis]**

[Article in Russian]

[Zubkova SM](#), [Varakina NI](#), [Mikhailik LV](#), [Bobkova AS](#), [Maksimov EB](#).

Paravertebral exposure to infrared radiation (0.87 micron, 5 mW) and permanent magnetic field in combination with one- and two-semiperiodic alternative magnetic fields (50 Hz, 15-30 mT) was studied in respect to the action on adaptive reactions in animals with experimental atherosclerosis. Complex consisting of infrared radiation, permanent magnetic field and one-semiperiodic pulse alternative magnetic field was most effective in restoration of vasomotor-metabolic and immune disturbances accompanying development of atherosclerosis.

Vopr Kurortol Fizioter Lech Fiz Kult. 1992 May-Jun;(3):14-7.

### **[Magnetotherapy in obliterating vascular diseases of the lower extremities]**

[Article in Russian]

[Kirillov IuB](#), [Shval'b PG](#), [Lastushkin AV](#), [Baranov VM](#), [Sigaev AA](#), [Zueva GV](#), [Karpov EI](#).

The investigators have developed a polymagnetic system "Aurora-MK-01" employing running impulse magnetic field to treat diseases of the leg vessels by the action on peripheral capillary bed. At a pregangrene stage a positive effect on peripheral capillaries was achieved in 75-82% of the patients treated.

Khirurgiia (Mosk). 1990 Nov;(11):41-3.

### **[Outpatient electromagnetic therapy combined with hyperbaric oxygenation in arterial occlusive diseases]**

[Article in Russian]

[Reut NI](#), [Kononova TI](#).

The authors first applied hyperbaric oxygenation (HBO) in the outpatient clinic in 1968. Barotherapy was conducted in 107 outpatients whose ages ranged from 27 to 80 years; they had various stages of the disease of 5- to 20-year history. In 70 patients treated for obliterating diseases of the vessels by HBO in a complex with magnetotherapy by means of magnetophors, the remission lasted 1-2 years; patients treated by HBO alone had a 3-8 month remission. A prolonged positive effect was produced in 64 patients. The suggested effective and safe method is an additional one to the existing means of treating this serious and progressive disease, which can be applied successfully in outpatient clinics.

Vestn Khir Im I I Grek. 1996;155(5):37-9.

**[The potentials of laser and electromagnetic-laser therapy in the treatment of patients with arteriosclerosis obliterans of the vessels of the lower extremities]**

[Article in Russian]

[Galimzianov FV](#).

A comparative analysis of the laser and electromagnetic laser therapy was performed in the complex treatment of patients with obliterating atherosclerosis of the lower extremity vessels. Laser treatment exerts a therapeutic effect related with its influence upon microcirculation. The effectiveness of complex treatment becomes higher when using a combination of laser therapy with the impulse electromagnetic therapy of complex modulation at the expense of improvement of the regional blood circulation in all links of the vasculature.

Vopr Kurortol Fizioter Lech Fiz Kult. 1993 Sep-Oct;(5):22-5.

**[The use of magnetics and laser therapy in treating obliterating vascular diseases of the extremities]**

[Article in Russian]

[Kirillov IuB](#), [Shval'b PG](#), [Lastushkin AV](#), [Sigaev AA](#), [Kachinskii AE](#), [Shashkova SN](#).

The paper presents the results of treatment received by 60 patients suffering from lower limb vascular obliteration stage IIA-III. The treatment involved combined use of magnetic field and laser irradiation. Peripheral circulation and central hemodynamics were evaluated rheographically and using ultrasound Doppler sphygmomanometry.

Combined application of the above two modalities produced a greater effect on central hemodynamics compared to them introduced alone.