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**Vitafon in Treatment of Various Forms of Migrainous Cephalgia in Women.**

Headache is one of the most common sicknesses in humans. According to The American Council for Headache Education (ACHE), nearly 18 million of clinic visits in America are from patients suffering cephalgia. One of the most frequent forms of primary headache is a migraine or migrainous cephalgia. 4 to 38% of the world population suffer migraines (A.M. Vein, O.A. Kolosova, N.Y. Yakovlev, T.A. Slyusar). The overwhelming majority of those are women of productive age. Migraine lasts many years. Its character and course can be very diverse and therefore the treatment approach should be strictly individual. Often, treatment used for one patient can be useless for the other one. Migraine in this regard is very temperamental and is related to the kind of disease where it is extremely hard to predict the result of its treatment, which served as a background for this research.

*Aim of research:* to enhance the results of complex treatment of patients with migrainous cephalgia.

*Purpose of research:* clinical and instrumental evaluation of the effectiveness of the Vitafon vibroacoustic effect on the disease.

**Materials and methods**

The effect has been tested on 32 women aged 16-56 suffering various forms of migrainous cephalgia. The main clinical entities included: migraine without aura – 16 patients (50%), migraine with aura – 12 (37.5%), migrainous epilepsy – 4 patients (12.5%). The patients'

initial condition was assessed using the clinical-anamnestic method and instrumental research results, including REG (rheoencephalography), EEG (electroencephalography), TCD (transcranial dopplerography), CT (computer tomography) of the brain, US (ultrasound) of genitals, kidney and ovarian phlebography. All patients underwent an endovascular procedure (application for invention No.2000109484 of 19.04.2000 "The Method of Radiodiagnostics and Endovascular Treatment of Migrainous Cephalgia in Women"). Insufficient clinical effect from endovascular procedure served as an indication for administration of Vitafon device.

High efficiency of acoustic microvibration effect on venous cerebral hemodynamics was considered as a theoretical justification for administration of Vitafon. The aim of Vitafon administration was to optimise the venous blood flow in small pelvis organs. At first stage, the procedure was carried out in mode 1 and 2 with vibraphones attached over the pubic bone in hypogastrium area, on both sides. Then, the area of vibroacoustic treatment was alternated between the above zone and K zone, and in the last 6 months, the procedure was carried out on K zone only. Length of application was determined by the severity of clinical presentation of migraine. As a rule, initial sessions were no longer than 5 minutes followed by daily extensions for further 5 minutes and up to a maximum of 30 min twice a day in severe cases of the illness. The treatment was administered in home conditions.

## **Research results**

In all examined cases, the patients initially were having headaches of various forms of intensity and recurrence. In four cases, migraineous cephalgia attacks were accompanied by or alternated with focal and general convulsions attacks. In all cases, according to REG results, there were signs of impeded venous flow from the

skull cavity; according to EEG – dysfunction of midline brain structure and the signs of readiness for convulsions, and in two cases – epicomplexes. According to TCD – increased peripheral vascular resistance and in half of cases – blood flow asymmetry in various vascular basins from 15-30%. CT of the brain showed the signs of moderately evident atrophy of the brain substance and mixed hydrocephaly.

The closest positive effect from Vitaфон administration was noted in 28 cases and was demonstrated by a considerably improved condition, less frequent and less intensive headache attacks, and in one case, absence of seizures (the rest period at daily administration was 2 months, whereas initially, prior to endovascular procedures, the attacks had happened daily, and not less than 3-4 times per week prior to Vitaфон treatment). In four cases, no effect has been noted. It could be due to the irregularity and insufficient length of application. Moreover, it is worth mentioning that all unsuccessful cases were in patients with severe clinical migraines – lengthy severe headache attacks often accompanied by neurological symptoms.

The evaluation was carried out based on careful anamnesis collection and long interviews with the patients using several kinds of questionnaires. REG and EEG results indicated some improvement, and in 17 cases – normalization of venous flow from the skull cavity and neurophysiological indicants.

### **Conclusion:**

1. Vitaфон device can be successfully used in patients with migraineous cephalgia in order to optimize the systemic blood flow and improve the CNS functions.
2. The best treatment effect is achieved by treatment administered in modes 1 or 2 with vibraphones attached to K zone.