

УДК 615.814.1

DOI <https://doi.org/10.32689/2663-0672-2023-3-4>

**Наталія СВИРИДОВА**

доктор медичних наук, професор, директор Інституту медичних та фармацевтичних наук, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 ([natalia.svyrydova@gmail.com](mailto:natalia.svyrydova@gmail.com))

ORCID: <https://orcid.org/0000-0002-2166-5904>

**Геннадій ЧУПРИНА**

доктор медичних наук, професор кафедри загальномедичних дисциплін, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 ([gen7chupryna@gmail.com](mailto:gen7chupryna@gmail.com))

ORCID: <https://orcid.org/0000-0003-1351-015X>

**Віталій СЕРЕДА**

кандидат медичних наук, завідувач кафедри загальномедичних дисциплін, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 ([servit1967@gmail.com](mailto:servit1967@gmail.com))

ORCID: <https://orcid.org/0000-0003-2498-0333>

**Natalia SVYRYDOVA**

Doctor of Medical Sciences, Professor, Director of the Institute of Medical and Pharmaceutical Sciences, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 ([natalia.svyrydova@gmail.com](mailto:natalia.svyrydova@gmail.com))

**Gennadii CHUPRYNA**

Doctor of Medical Sciences, Professor of the Department of General Medical Disciplines, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 ([gen7chupryna@gmail.com](mailto:gen7chupryna@gmail.com))

**Vitaly SEREDA**

Candidate of Medical Sciences, Head of the Department of General Medical Disciplines, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 ([servit1967@gmail.com](mailto:servit1967@gmail.com))

**Бібліографічний опис статті:** Свиридова Н., Чуприна Г., Серед В. Застосування рефлексотерапії за методом «балансування гексаграм» при цефалгіях скроневої області. *Сучасна медицина, фармація та психологічне здоров'я*. 2023. Вип. 3 (12). С. 24–30. DOI: <https://doi.org/10.32689/2663-0672-2023-3-4>

**Bibliographic description of the article:** Svyrydova, N., Chupryna, G., Sereda V. (2023). Zastosuvannya refleksoterapii za metodom «balansuvannya geksagram» pry tsefalgiyach skronevoi oblasti. [Application of reflexotherapy according to the "hexagram balancing" method for cephalalgias of the temporal region]. *Suchasna medytsyna, farmatsiia tapsykhologichnezdorovia – Modern medicine, pharmacy and psychological health*, 3(12). С. 24–30. DOI: <https://doi.org/10.32689/2663-0672-2023-3-4>

**ЗАСТОСУВАННЯ РЕФЛЕКСОТЕРАПІЇ ЗА МЕТОДОМ «БАЛАНСУВАННЯ ГЕКСАГРАМ» ПРИ ЦЕФАЛГІЯХ СКРОНЕВОЇ ОБЛАСТІ**

**Анотація.** Стаття присвячена одній з найбільш актуальних проблем неврології – цефалгіям. Часто різні захворювання, особливо такі, що протікають з больовим синдромом, і ті, що підсилюються за умов дії психоемоційного стресу та інших несприятливих психосоціальних чинників, супроводжуються тривалою симптоматикою. Медикаментозні методи лікування при цьому не повністю ефективні, тож слід вдаватися до немедикаментозних технологій. Вже давно застосовується комплексне лікування цефалгій скроневої області з використанням методів рефлексотерапії, не лише при неврологічних захворюваннях, а й при психосоматичних проблемах. Рефлексотерапія тут показана як завдяки своїм потужним протибольовим механізмам, так і за рахунок того, що вона здатна поліпшити емоційний стан.

Важливу роль в порушеннях нейроімунікомунікацій при больових синдромах приймають участь ендогенні опіоїдні системи, нейротрансмітери ацетилхолін, норадреналін, дофамін, субстанція Р, гальмієні і збуджувальні амінокислоти, вільні радикали, нейротрофічні фактори, збільшення активності Na<sup>+</sup> каналів, значна активація мікроглії, дисфункція імунної системи, гіпоталамо-гіпофізарно-надниркової осі, порушення процесів нейропластичності в центральній нервовій системі. Але ж, як відомо, завдяки нормалізації цих речовин і регуляторних впливів, забезпечуються механізми лікувальних ефектів методів акупунктури.

Ендогенні опіоїдні системи тісно пов'язані з патологічними механізмами при цефалгіях, але, разом з тим, вони, насамперед, формують механізми акупунктурних ефектів і є однією з найбільш вивчених нейромедіаторних систем в дослідженнях щодо акупунктури.

В статті представлено основні теоретичні засади методу «балансування гексаграм» і його практичну реалізацію. Також подано клінічний випадок: цефалгічний синдром скроневої області. Наведено методи акупунктурної діагностики, детально охарактеризовано акупунктурний діагноз, подано описання акупунктурної корекції, використані в лікуванні методи медикаментозної корекції, розглянуто особливості «сприятливої» гексаграми.

Таким чином, пацієнти з цефалгічним синдромом скроневої області зустрічаються у практичній діяльності лікаря-невролога і лікаря-рефлексотерапевта. В комплексі лікувальних заходів при цефалгічному синдромі скроневої області може бути ефективним застосування методу акупунктури «балансування гексаграм».

**Мета.** Розглянути особливості застосування рефлексотерапії за методом «балансування гексаграм» в комплексній реабілітації хворої з цефалгією скроневої області.

**Наукова новизна.** Вперше в нашій країні використано методу складання акупунктурних рецептів і акупунктуру за методом «балансування гексаграм» в комплексній реабілітації хворої з цефалгією скроневої області.

**Методи.** Ми розглядаємо один клінічний випадок застосування рефлексотерапії за методом «балансування гексаграм» в комплексній реабілітації хворої з цефалгією скроневої області. Використані методи клінічного од'єктивного неврологічного обстеження, метод синдромальної діагностики традиційної Китайської медицини, метод діагностики по пульсу, метод діагностики по язичку.

**Результати.** В результаті лікування за методом «балансування гексаграм» стан хворої поліпшився: зменшилась частота та інтенсивність головного болю і стрибки артеріального тиску стали не такими значними.

**Висновки.** 1. Пацієнти з цефалгічним синдромом скроневої області зустрічаються в практиці невролога і рефлексотерапевта.

2. У комплексі лікувальних заходів при цефалгічному синдромі скроневої області ефективним може бути застосування акупунктурного методу «балансування гексаграм».

**Ключові слова:** рефлексотерапія, метод «балансування гексаграм», цефалгічний синдром скроневої області.

## APPLICATION OF REFLEXOTHERAPY ACCORDING TO THE "HEXAGRAM BALANCING" METHOD FOR CEPHALALGIAS OF THE TEMPORAL REGION

**Abstract.** The article is devoted to one of the most urgent problems of neurology – cephalgias. Often, various diseases, especially those that occur with a pain syndrome, and those that are aggravated under the influence of psycho-emotional stress and other adverse psychosocial factors, are accompanied by long-term symptoms. Medicinal methods of treatment are not fully effective, so non-medicinal technologies should be resorted to. Complex treatment of cephalalgia of the temporal region using reflexotherapy methods has been used for a long time, not only for neurological diseases, but also for psychosomatic problems. Reflexotherapy is shown here both due to its powerful anti-pain mechanisms and due to the fact that it is able to improve the emotional state.

Endogenous opioid systems, neurotransmitters acetylcholine, norepinephrine, dopamine, substance P, inhibitory and excitatory amino acids, free radicals, neurotrophic factors, increased activity of Na<sup>+</sup> channels, significant activation of microglia, dysfunction of the immune system, hypothalamo-pituitary-adrenal axis, disruption of neuroplasticity processes in the central nervous system. But, as is known, thanks to the normalization of these substances and regulatory influences, the mechanisms of therapeutic effects of acupuncture methods are provided.

Endogenous opioid systems are closely related to pathological mechanisms in cephalgias, but, at the same time, they primarily form the mechanisms of acupuncture effects and are one of the most studied neurotransmitter systems in acupuncture research.

The article presents the main theoretical principles of the "balance of hexagrams" method and its practical implementation. A clinical case is also presented: cephalic syndrome of the temporal region. The methods of acupuncture diagnosis are presented, the acupuncture diagnosis is characterized in detail, the description of acupuncture correction is given, the methods of medical correction used in treatment, the features of the "favorable" hexagram are considered.

Thus, patients with cephalic syndrome of the temporal region are found in the practice of a neurologist and a reflexologist. In the complex of therapeutic measures for cephalic syndrome of the temporal region, the use of the acupuncture method "balancing hexagrams" can be effective.

**Purpose.** To consider the features of the use of reflexology using the method of "balancing hexagrams" in the complex rehabilitation of a patient with cephalgia of the temporal region.

**Scientific novelty.** For the first time in our country, the method of compiling acupuncture prescriptions and acupuncture using the method of "balancing hexagrams" was used in the complex rehabilitation of a patient with cephalgia of the temporal region.

**Methods.** We consider one clinical case of the use of reflexology using the method of "balancing hexagrams" in the complex rehabilitation of a patient with cephalgia of the temporal region. The methods of clinical objective neurological examination, the method of syndromic diagnosis of traditional Chinese medicine, the pulse diagnosis method, and the tongue diagnosis method were used.

**Results.** As a result of treatment using the "balancing hexagrams" method, the patient's condition improved: the frequency and intensity of headaches decreased, and blood pressure spikes became less significant.

**Conclusions.** 1. Patients with cephalic syndrome of the temporal region are found in the practice of a neurologist and a reflexologist.

2. In the complex of treatment measures for cephalic syndrome of the temporal region, the use of the acupuncture method "balancing hexagrams" can be effective.

**Key words:** reflextherapy, "balancing hexagrams" method, cephalic syndrome of the temporal region.

**Topicality.** Often, various diseases [1, 4, 16] that are aggravated under the influence of psycho-emotional stress and other adverse psychosocial factors [8, 9], especially those that occur with a pain syndrome [3, 6, 10, 13], or those that are accompanied by long-term symptoms [11], respond positively to complex treatment using reflexotherapy methods [1, 7, 15, 16].

The positive effect of reflexotherapy methods on the body is mainly realized through the endogenous opioid system [15, 17, 18, 19].

Endogenous opioid systems, neurotransmitters acetylcholine, norepinephrine, dopamine, substance P, inhibitory and excitatory amino acids, free radicals, neurotrophic factors, increased activity of Na<sup>+</sup> channels, significant activation of microglia, dysfunction play an important role in neuroimmunocommunication disorders in various nervous system diseases and pathological conditions immune system, hypothalamic-pituitary-adrenal axis, disruption of neuroplasticity processes in the central nervous system. But also, as is well known, thanks to the normalization of these substances and regulatory influences, the mechanisms of therapeutic effects of acupuncture methods are provided [15, 17, 18, 19].

Endogenous opioid systems are closely related to pathological mechanisms in diseases of the nervous system, but, at the same time, they primarily form the mechanisms of acupuncture effects and are one of the most studied neurotransmitter systems in acupuncture research [15, 17, 18, 19]. Endogenous opioid systems cause a number of effects in the regulation of pain mechanisms, emotions, cognitive functions, endocrine glands, urination, neuroplasticity, cardiovascular activity, breathing, digestion, sexual functions [15, 17, 18, 19].

The above-mentioned effects, in conclusion, are possible due to the fact that acupuncture increases the activity of endogenous opioid systems in the central nervous system with an increase in the level of beta-endorphin (as well as other opioids) in the cerebrospinal fluid and blood plasma [15, 17, 18, 19]. Due to the regulation of endogenous opioid systems, as shown by the data of modern research, acupuncture is able to mitigate numerous stressors on the nervous system and the immune system, exerting a projective effect against their damage.

Reflexotherapy methods are effective not only neurological diseases, but also with depression, asthenia and others psychoemotional disorders [8, 12, 14, 21], and exaggerates the placebo effect, as stated by modern research [20].

Below, we would like to cite a clinical case where a complex approach to treatment using reflexotherapy methods, in particular the "balancing hexagrams" method, was used in a patient with cephalic syndrome of the temporal region.

**Presentation of the main material.** The method of "balancing hexagrams" is one of the methods of compiling acupuncture prescriptions [23, 24, 25], of which there are many in the practice of acupuncture. It is used as an adjunct to basic acupuncture treatment. The main task of the "balancing hexagrams" method is to change the state of the "affected" acupuncture meridian and the corresponding "affected hexagram" to the energy state of the "favorable" hexagram, and thus a positive change in the CHI (vital energy) of the "affected" acupuncture meridian, corresponding it of an organ and CHI of the whole organism [23, 24, 25]. The main theoretical principles of the "balancing hexagrams" method: 20 hexagrams are selected from the "full set" – 64 hexagrams of I Ching, based on a multifaceted analysis of hexagrams. The first thing to do using this method is to find the "affected" acupuncture meridian based on acupuncture diagnostic methods. Then you need to pick up, in accordance with it, the "affected" hexagram. And then, from 20 possible options, choose a "favorable" hexagram [23, 24, 25].

What should be paid attention to when choosing a "favorable" hexagram: the correspondence between the patient's clinical symptoms and the used strokes of the "afflicted" hexagram; for the presence of a quick or delayed clinical positive effect after using the "favorable" hexagram; in accordance with the "auspicious" hexagram of the acupuncture season; the results of the analysis of the "favorable" hexagram (its upper and lower trigrams in accordance with the ideas about the theories of Wu-Xing, YIN-YANG, the location of the trigrams, the functions of the trigrams; the results of the analysis of the "afflicted" hexagram [23, 24, 25].

Features of the clinical application of the "balancing hexagrams" method – we would like to draw your attention to the fact that it is designed to enhance the effect of using other acupuncture methods. Therefore, acupuncture using this method is not often used. The total number of procedures according to it is 1 session per week of acupuncture treatment. If we talk about the absolute number of procedures according to it, then in our practice we conducted them from 1 to 4, depending on the total duration of the course of acupuncture therapy [23, 24, 25]. It is necessary to make full use of the possibilities of the general action of the "favorable" hexagram [23, 24, 25]. It is desirable to ensure that the "image" and "symbol" of the "favorable" hexagram corresponds to the functional state that will occur with the patient during treatment [23, 24, 25].

The most common method of analysis in traditional Chinese medicine is, namely, the method of "image" and "symbol", according to which trigrams and hexagrams reflect different aspects of life, for example: different family members, different seasons, body parts, organs, functions, different acupuncture meridians, functional states, pathological changes. In terms of the graphic

representation of the "favorable" hexagram, it is necessary to take into account the main movements of the CHI in the pathological process of the patient (the upper and lower trigrams and the "opposite" lines of both hexagrams in the aspect of raising the CHI up or lowering the CHI down, which is often necessary in the acupuncture correction of patients). Regarding the location of the hexagram lines, we know, thanks to the works of Wen Wang and Wu Wang, the founders of this method, that when the YIN and YANG lines within one hexagram occupy the middle positions, this is called "middle harmony", and that these hexagrams, when applied as "auspicious", they have privileges over other hexagrams of the I Ching [5, 23, 24, 25].

Clinical case: patient G., women, 43 years old, consulted a neurologist and reflexologist in December 2017, after she underwent a course of treatment by a neurologist and a reflexologist using basic neurological and reflexotherapy treatment, with complaints of a throbbing headache in the temporal region, more on the left side, dizziness and ringing in the ears. The headache increased when the patient was irritated, under the influence of stress. Also disturbed sleep, periodic heaviness in the head and weakness in the legs, rush of blood to the face, redness in the eyes, bitter taste in the mouth, indigestion, dry throat, muscle spasms. Complaints about pronounced general weakness, rapid mental fatigue, and emotional lability were also disturbing. In addition, the patient was troubled by periodic weakness in the limbs, dizziness, heaviness in the head, tinnitus, palpitations, shortness of breath, decreased appetite, pain in the epigastrium. Blood pressure periodically rises to 150/100 mm. m. a. Clinical diagnosis: hypertensive dyscirculatory encephalopathy of the I-II stage, mainly in the vertebral-basilar basin, with cephalic, vestibulo-cochlear syndromes. Arterial hypertension of the I-II stage.

In traditional Chinese medicine, headaches in the temple area are classified as shaoyang headaches. This is how the doctor-reflexologist considered them. That is, they arise as a result of an imbalance of the gallbladder system and its acupuncture meridian.

In the acupuncture nomenclature, French designations for acupuncture points have been used for a long time, which has become established in the scientific literature of our country [14]. Then it was decided to use English names to indicate acupuncture points [22]. In our works [4], we give an algorithm for the transition from the French acupuncture nomenclature to English, but the most important thing in these nomenclature is the Chinese name of the acupuncture point. So in this article, we use the English acupuncture nomenclature with the Chinese name of the acupuncture point.

For acupuncture correction of pains classified as shaoyang headaches, corporal acupuncture points

are used: SP 9 (Tai yang), G 20 (Feng chi), G 8 (Shuai gu), TE 23 (Si zhu kun), TE 20 (Jiao sun), TE 5 (Wai guan), G 41 (Zu lin qi), GB 43 (Xia xi). According to the "opposite hand" rule, acupuncture points are used: TE 1 (Guan chun). Micro-acupuncture systems are also used: auricular points: AP 35 (temple) and scalp zones: MS10 (front temporal line), MS11 (posterior temporal line). The patient underwent 10 reflexotherapy procedures, but the effect was incomplete.

Acupuncture diagnosis we installed one: headache due to the rise of hyperactive liver YAN (main). The tongue was red, with reddening of its tip, with a thin yellow coating, a stringy and rapid pulse was observed. The pulse was maximal in the second position (deep) on the left and minimal in the second position (also deep) on the right, that is, by the mechanism of "excessive" control by the "liver" on the "spleen". So, the additional (syndromal) acupuncture diagnosis was: "excessive" control by (grandfather to grandson) "liver" to "spleen". The cause of the disease is hyperactivity of the "liver" system. So, the "affected acupuncture meridian" is the liver meridian. Kun, corresponding to the liver, is the affected hexagram.

Treatment. In terms of medication, the patient was prescribed Sermion, Actovegin, Pentoxifylline, Triplixam, Vitaxon, Armadine, Tocopherol, Tiocitam-Forte, Rosuvastatin, but this did not produce the desired improvement.

Then we resorted to acupuncture treatment using the "balancing hexagrams" method.

We choose a "favorable" hexagram for this state: it is Ding, I Ching hexagram No. 50. Evaluating the hexagram No. 50 Ding positively, it should be noted that the "affected hexagram" Kun corresponds to the "Earth", and the affected acupuncture meridian corresponds to the "Tree", and we have a clinical situation of "excessive influence of the "Tree" on the "Earth", which in this case is positive. The upper trigram of the hexagram Ding – Li corresponds to "Fire", and its lower trigram – Xun – corresponds to "Tree" ("Fire" and "Tree" are "mother" and "son" according to Wu-Xing, and strong stimulation of "Fire" suppresses the "Tree", which must be achieved). Also, the distal acupuncture points that we used for the effect correspond to the patient's

6	■	■	Liv 8	K 10
5	■	■	Liv 5	K 7
4	■	■	Liv 4	K 4
3	■	■	Liv 3	K 3
2	■	■	Liv 2	K 2
1	■	■	Liv 1	K 1

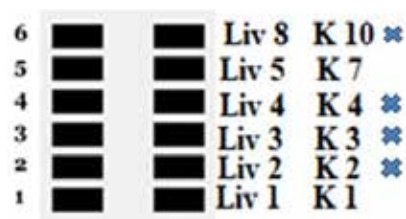
**Fig. 1. Correspondence in traditional Chinese medicine of the strokes of the "affected" Kun hexagram to the liver and kidney acupuncture meridian points. [adapted by 23]**

symptoms, and the most effective time to use this hexagram for therapeutic purposes is winter.

The general meaning of hexagram No. 50 Din: "The fire is blown by the wind under the cauldron". Image: "Leave the old and do the new". Symbol: "Harmonize old relationships with new ones". Hold. Find. Establish. Sacred vessel. Progress and success. Restraint and transformation. A very good future. Stability after the revolution. New order after chaos. Success will bring structure to your life. Help in misunderstanding. Develop such a lifestyle to have health and vitality [5, 23]. Medical meaning of hexagram No. 50 Din: 1) prognostic – disease due to diet violation, emotional and sexual excesses; powerful pathogenic factors, virulent diseases; liver YAN excess; food infections; 2) indications for acupuncture treatment – contagious febrile diseases; mental disorders; abscesses; pulmonary diseases; generalized edema; cystitis; constipation; diseases during pregnancy; diseases caused by overeating and stress; hyperactivity of liver YAN; rush of blood to the head; progressive dyspepsia [5, 23].

Acupuncture prescription for this case (Fig. 2): the patient has problems on the left side (headache in the left temporal region is her main problem), so we inject acupuncture points Liv 2 (Xin jian), Liv 3 (Tai chung), Liv 4 (Zhong feng), Liv 8 (Qu quan) on the right side. On the left side, we prick the acupuncture points G 43 (Xia si), G 41 (Tzu ling tsi), G 40 (Qiu xiu), G 34 (Yang ling quan) (a paired channel that enhances the treatment, the acupuncture points for influence are similar to the number of lines of the "affected" hexagram.

The acupuncture procedure according to the "balancing of hexagrams" method was carried out



**Fig. 2. Acupuncture points for exposure. We choose points corresponding to the "opposite" (on the "affected" hexagram in relation to the "favorable" hexagram) – 2, 3, 4, 6 dashes for the acupuncture effect. [adapted by 23]**

3 times during the course treatment that lasted 16 sessions. Also used "nosological" acupuncture prescription, in particular the following acupuncture points:

G 20 (Feng chi), GV 20 (Bai hui), EX 1 (Si shen tsung), LI 4 (He gu), TE 5 (Wai guan); auricular points: AP 34 (cortex), AP 35 (temple) AP 96 (on the left is the pancreas, on the right is the gall bladder), AP 97 (liver).

Catamnesis: after a course of treatment using reflextherapy methods, the patient's condition improved: the frequency and intensity of headaches, irritability, and blood pressure spikes became less severe.

**Conclusions:** 1. Patients with cephalic syndrome of the temporal region are found in the practice of a neurologist and a reflexologist.

2. In the complex of treatment measures for cephalic syndrome of the temporal region, the use of the acupuncture method "balancing hexagrams" can be effective.

#### Список використаних джерел:

1. Мачерет Е. Л., Коркушко А. О. Основы традиционной китайской медицины в рефлексотерапии. К.: Дія, 2005. 397 с.
2. Мачерет Е. Л., Лысенюк В.П. Саамосюк І. З. Атлас акупунктурных зон. К.: Вища школа, 1986. 255 с.
3. Свиридова Н., Чуприна Г., Парнікоза Т. [та ін.] Вибрані питання застосування методів рефлексотерапії у лікуванні больових синдромів [Посібник для лікарів-слухачів закладів (факультетів) післядипломної освіти]. К.: ТОВ «Тропеа», 2023. 202 с.
4. Свиридова Н., Морозова О., Чуприна Г., [та ін.] Рефлексотерапія: підручник за ред. Н. К. Свиридової, О. Г. Морозової. К.: ТОВ СІКГРУП Україна, 2017. Т. 1–3, 1108 с.
5. Свиридова Н., Морозова О., Чуприна Г., [та ін.] Рефлексотерапія: підручник за ред. Н. К. Свиридової, О. Г. Морозової. К.: ТОВ «Тропеа», 2023. Т. 4. 220 с.
6. Чуприна Г. Використання рефлексотерапії в комплексному лікуванні захворювань нервової системи з больовим синдромом / Abstracts of XXVII International Scientific and Practical Conference «Current, modern and new ways of improving scientific solutions» (Florence, Italy, July 10–12, 2023), P. 78–79).
7. Чуприна Г., Мачерет Е., Сулік Р. Особливості протікання, нетрадиційні діагностичні та лікувальні підходи до астеничних синдромів у структурі неврологічної патології / Мат. науч.-практ. конф. с межд. уч-ем «Возрастная нейропсихол. и нейропсихиатрия», 19 февр. 2007 г. Киев, 2007. С. 13–16.
8. Чуприна Г.М., Свиридова Н.К., Ханенко Н.В., Середа В.Г. Використання рефлексотерапії в комплексному лікуванні захворювань системи дихання з психоемоційними порушеннями / *Proceedings of the 2nd International Scientific and Practical Internet Conference "Global Society in Formation of New Security System and World Order"* Dnipro, Ukraine, July 27–28, 2023, P. 433–435.
9. Чуприна Г.М., Свиридова Н.К., Ханенко Н.В., Сулік Р.В. Використання рефлексотерапії в комплексному лікуванні захворювань шлунково-кишкового тракту з психоемоційними порушеннями / *Proceedings of the 5th International*

Scientific and Practical Internet Conference "Integration of Education, Science and Business in Modern Environment: Summer Debates", Dnipro, Ukraine, August 3–4, 2023, P. 535–537.

10. Чуприна Г., Свиридова Н., Ханенко Н., Серета В., Сулік Р. Використання рефлексотерапії в комплексному лікуванні хронічного холециститу з цефалгічним синдромом / *Proceedings of the XXVII International Scientific and Practical Conference «Trends of young scientists regarding the development of science»*, Edmonton, Canada, July 11–14, 2023, P. 112–113.

11. Чуприна Г., Свиридова Н., Ханенко Н., Серета В., Сінько І. Використання рефлексотерапії в комплексному лікуванні невротичної лицеві нерва / *Proceedings of the XXVIII International Scientific and Practical Conference «Science and development of methods for solving modern problems»*, Melbourne, Australia July 18–21, 2023. – P. 118–122.

12. Чуприна Г., Свиридова Н., Ханенко Н., Серета В. Використання рефлексотерапії в комплексному лікуванні синдрому професійного вигорання / *Збірник мат. Всеукр. наук.-практ. конф., присвяч. 105-й річниці від дня народження В. Сухомлинського «Захист психічного здоров'я учасників освітнього процесу в умовах війни та повоєнного часу»*. Кропивницький, 5 травня 2023 р., С. 301–304.

13. Чуприна Г., Свиридова Н., Сінько І. Використання рефлексотерапії в комплексному лікуванні при пароксизмальній гемікранії / *Abstracts of XXVIII International Scientific and Practical Conference «Unusual methods of development of science and thoughts»*, Madrid, Spain, July 17–19, 2023, P. 92–96.

14. Acupuncture for chronic fatigue syndrome and idiopathic chronic fatigue: a multicenter, nonblinded, randomized controlled trial [Electronic resource] (2015) / J. -E. Kim, B. -K. Seo, J. -B. Choi [et al.] // *Trials*. 2015. Vol. 16, № 314. P. 1–13. URL: <http://trialsjournal.biomedcentral.com/articles/10.1186/s13063-015-0857-0>.

15. Acupuncture therapy for neurological diseases: a neurobiological view (2010) / Xia Y. [et al.]; eds. Y. Xia, X. Cao, G. Wu., J. Cheng. Beijing: Tsinghua university press and Berlin, Heidelberg: Springer Verlag, 2010. 474 p.

16. Chinese acupuncture and moxibustion (2002). Shanghai: Publishing house of Shanghai University of TCM, 2002. 371 p.

17. Current research in acupuncture / Y. Xia [et al.]; eds. Y. Xia, G. Ding, G-C. Wu. – New York: Springer science + Business media, 2013. 731 p.

18. Neural functions of the delta-opioid receptor / Y. Xia [et al.]; ed. Y. Xia. Houston: Springer IPS, 2015. 652 p.

19. Opioid receptors (methods and protocols) / S. M. Spampinato [et al.]; ed. S. M. Spampinato. – New York: Springer science+Business media, 2015. 323 p.

20. Placebo acupuncture devices: considerations for acupuncture research [Electronic resource] / Zhu D., Gao Y., Chang J. [et al.] // Hindawi publish. corp. evidence-based complement. and alternat. med. Vol. 2013. P. 1–9. URL: <https://www.hindawi.com/journals/ecam/2013/628907/>.

21. Schnyer, R. N., Allen, J. B. Acupuncture in the treatment of depression / R. N. Schnyer, London: Harcourt Publishers, 2001. 212 p.

22. Scientific Group on International Acupuncture Nomenclature A proposed standard international acupuncture nomenclature : report of a WHO scientific group (1991); adaptovanyi v Ukraini : informatsiynyi lyst MOZ Ukrainy №274-2017 [adapted to Ukraine – information sheet of the Ministry of Health of Ukraine №274-2017].

23. Twicken D. I Ching acupuncture. The balance method /clinical applications of the Ba Gua I Ching/ London and Philadelphia: Singing Dragon, 2012. 275 p.

24. Twicken D. Eight extraordinary channel Qi Jing Ba Mai/ London and Philadelphia: Singing Dragon, 2013. 228 p.

25. Twicken D. The divergent channels Jing Bie/ London and Philadelphia: Singing Dragon, 2014. 213 p.

#### References:

1. Macheret E, Korkyshko A. (2005). *Osnovy traditsyonnoi kitaiskoi meditsyny v refleksoterapii* [Basics of Traditional Chinese Medicine in Reflexology]. Kyiv: DIA, 397 p.

2. Macheret E., Lysenuk V., Samosuk I. (1986). *Atlas akupunktury zon* [Atlas of acupuncture zones]. Kyiv: Vyscha shkola, 255 p.

3. Svyrydova N., Chupryna G., Parnikoza T. et al. (2023). *Vybrani pytannya zastosuvannya metodiv refleksoterapii u likuvanni bolovychykh syndromiv* [Selected issues of the application of reflexotherapy methods in the treatment of pain syndromes]. Kyiv : TOV TROPEA, 202. [in Ukrainian].

4. Svyrydova N., Morozova O., Chupryna G. [et al.] (2017). *Refleksoterapiya: pidruchnyk* [Reflexotherapy: textbook]. Kyiv: TOV SIKGRUP Ukraine, V. 1–3, 1108. [in Ukrainian].

5. Svyrydova N., Morozova O., Chupryna G. M. et al. (2023). *Refleksoterapiya: pidruchnyk* [Reflexotherapy: textbook]. Kyiv : TOV TROPEA, V. 4, 220 [in Ukrainian].

6. Chupryna G. (2023). *Vykorystannya refleksoterapii v kompleksnomu likuvanni zachvoruvan nervovoi systemy z bolovym syndromom* [The use of reflexology in the complex treatment of diseases of the nervous system with pain syndrome] / *Abstracts of XXVII International Scientific and Practical Conference «Current, modern and new ways of improving scientific solutions»*, 78–79 [in Ukrainian].

7. Chupryna G., Macheret E, Sulik R. (2007). *Osoblyvosti protikannia, netradytsiini diagnostychni ta likuvalni pidchody do astenichnykh syndromiv u strukturi nevrologichnoi patologii* [Peculiarities of the course, non-traditional diagnostic and treatment approaches to asthenic syndromes in the structure of neurological pathology] // *Nauchno-prakticheskie materialy konferentsii s mezhdunarodnym uchastiem "Vozrastnaya neiropsichologiya i neiropsichiatrya" – Scientific and practical materials conference with international participation "Age-related neuropsychology and neuropsychiatry"*. 13–17 [in Ukrainian].

8. Chupryna G., Svyrydova N., Kchanenko N. [et al.] (2023). *Vykorystannya refleksoterapii v kompleksnomu likuvanni zachvoruvan systemy dychannya z psychoemotsiynnykh porushennyamy* [The use of reflexology in the complex treatment of diseases of the respiratory system with psycho-emotional disorders] / *Proceedings of the 2nd International Scientific and*

Practical Internet Conference "Global Society in Formation of New Security System and World Order" Dnipro, Ukraine (July 27–28, 2023), pp. 433–435 [in Ukrainian].

9. Chupryna G., Svyrydova N., Kchanenko N. [et al.] (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni zachvoruvan shlunkovo-kyshcovogo traktu z psychoemotsiynymy porushennyamy [The use of reflexology in the complex treatment of diseases of the gastrointestinal tract with psycho-emotional disorders] / Proceedings of the 5th International Scientific and Practical Internet Conference "Integration of Education, Science and Business in Modern Environment: Summer Debates", Dnipro, Ukraine (August 3-4, 2023), pp. 535–537 [in Ukrainian].

10. Chupryna G., Svyrydova N., Kchanenko N. [et al.] (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni chronichnogo choletsystytu z tsefalgichnym syndromom [The use of reflexology in the complex treatment of chronic cholecystitis with cephalic syndrome] / Proceedings of the XXVII International Scientific and Practical Conference «Trends of young scientists regarding the development of science» (Edmonton, Canada July 11–14, 2023), pp. 112–113 [in Ukrainian].

11. Chupryna G., Svyrydova N., Kchanenko N. [et al.] (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni nevropatii lytsevogo nerva [The use of reflexology in the complex treatment of neuropathy of the facial nerve] / Proceedings of the XXVIII International Scientific and Practical Conference «Science and development of methods for solving modern problems», Melbourne, Australia July 18–21, 2023. – pp. 118–122.

12. Chupryna G., Svyrydova N., Kchanenko N., Sereda V. (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni syndromu profesiynogo vygorannya [The use of reflexology in the complex treatment of the syndrome of professional burnout] // A collection of all-Ukrainian scientific and practical materials. of the conference dedicated to the 105th anniversary of the birth of V. Sukhomlynskyi "Protection of the mental health of participants in the educational process in the conditions of war and post-war times." 301–304 [in Ukrainian].

13. Chupryna G., Svyrydova N., Sinko I. (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni pry paroksizmalniy gemicranii [ The use of reflexology in the complex treatment of paroxysmal hemicrania] / Abstracts of XXVIII International Scientific and Practical Conference «Unusual methods of development of science and thoughts». 92–96 [in Ukrainian].

14. Acupuncture for chronic fatigue syndrome and idiopathic chronic fatigue: a multicenter, nonblinded, randomized controlled trial (2015) [Electronic resource] / J. -E. Kim, B. -K. Seo, J. -B. Choi [et al.] // Trials. 2015. Vol. 16, № 314. P. 1–13. Retrieved from <http://trialsjournal.biomedcentral.com/articles/10.1186/s13063-015-0857-0>.

15. Acupuncture therapy for neurological diseases: a neurobiological view (2010) / Xia Y. [et al.]; eds. Y. Xia, X. Cao, G. Wu, J. Cheng. Beijing: Tsinghua university press and Berlin, Heidelberg: Springer Verlag, 2010. 474.

16. Chinese acupuncture and moxibustion (2002). Shanghai: Publishing house of Shanghai University of TCM, 2002. 371.

17. Current research in acupuncture (2013) /Y. Xia [et al.]; eds. Y. Xia, G. Ding, G-C. Wu. New York: Springer science + Business media, 2013. 731.

18. Neural functions of the delta-opioid receptor (2015) / Y. Xia [et al.]; ed. Y. Xia. Houston: Springer IPS, 2015. 652.

19. Opioid receptors (methods and protocols) (2015) / S. M. Spampinato [et al.]; ed. S. M. Spampinato. New York: Springer science+Business media, 2015. 323.

20. Placebo acupuncture devices: considerations for acupuncture research (2013). [Electronic resource] / Zhu D., Gao Y, Chang J. [et al.] // Hindawi publish. corp. evidence-based complement. and alternat. med. Vol. 2013. P. 1–9. Retrieved from <https://www.hindawi.com/journals/ecam/2013/628907/>.

21. Schnyer R. N. Acupuncture in the treatment of depression (2001) / R. N. Schnyer, J. J. B. Allen. London: Harcourt Publishers, 2001. 212.

22. Scientific Group on International Acupuncture Nomenclature A proposed standard international acupuncture nomenclature : report of a WHO scientific group.19.1991); adaptovanyi v Ukraini : informatsiynyi lyst MOZ Ukrainy №274-2017 [adapted to Ukraine: information sheet of the Ministry of Health of Ukraine №274-2017].

23. Twicken D. (2012). I Ching acupuncture. The balance method /clinical applications of the Ba Gua I Ching/ London and Philadelphia: Singing Dragon, 2012. 275.

24. Twicken D. (2013). Eight extraordinary channel Qi Jing Ba Mai/ London and Philadelphia: Singing Dragon, 2013. 228.

25. Twicken D. (2014). The divergent channels Jing Bie/ London and Philadelphia: Singing Dragon, 2014. 213.