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Володимир НОВОШИЦЬКИЙ

кандидат медичних наук, доцент кафедри стоматології, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 (kab413@ukr.net)

ORCID: <https://orcid.org/0000-0002-2334-2797>

Геннадій ЧУПРИНА

доктор медичних наук, професор кафедри загальномедичних дисциплін, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 (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)

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

Володимир КРАСНОВ

кандидат медичних наук, доцент кафедри стоматології, Міжрегіональна академія управління персоналом, вул. Фрометівська, 2, м. Київ, Україна, індекс 02000 (vladymyr.krasnov@gmail.com)

ORCID: <https://orcid.org/0000-0001-6355-6848>

Volodymyr NOVOSHYTSKYI

Candidate of Medical Sciences, Associate Professor at the Department of Stomatology, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 (kab413@ukr.net)

Gennadii CHUPRYNA

Doctor of Medical Sciences, Professor at the Department of General Medical Disciplines, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 (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)

Volodymyr KRASNOV

Candidate of Medical Sciences, Associate Professor at the Department of Stomatology, Interregional Academy of Personnel Management, 2, Frometivska St, Kyiv, Ukraine, postal code 02000 (vladymyr.krasnov@gmail.com)

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**ЗАСТОСУВАННЯ РЕФЛЕКСОТЕРАПІЇ ЗА МЕТОДОМ «БАЛАНСУВАННЯ ГЕКСАГРАМ»
В КОМПЛЕКСНІЙ РЕАБІЛІТАЦІЇ ПРИ ПАРОКСОЗМАЛЬНІЙ ГЕМІКРАНІЇ**

Анотація. У статті піднімаються такі актуальні питання – тема комплексного лікування пароксизмальної гемікранії. Ця патологія виникає зазвичай у тих людей, у яких знижено рівень функціонування антиноцицептивних систем, особливо опіоїдної, а також в анамнезі яких є ураження нервової системи (частіше центральної нервової системи).

Хронічна пароксизмальна гемікранія, також відома як синдром Сястада. Минуло вже 40 років з тих пір, як хронічна пароксизмальна гемікранія була вперше описана в 1974 році Сястадом і Дейлом. Але якщо засіб її медикаментозного

лікування було знайдено (індометацин у дозі 150 мг на день або менше), то залишається проблема побічних явищ – ульцерогенного ураження шлунково-кишкового тракту внаслідок тривалого прийому індометацину. Таким чином, багато хворих приймати його тривалий час не хочуть. Тут на допомогу практичному лікареві приходять методи рефлексотерапії.

Методи рефлексотерапії ефективні саме при наявності больового синдрому завдяки своїм потужним протибольовим властивостям: при впливі рефлексотерапії відбувається гальмування аферентних больових імпульсів за рахунок блокування Na^+ каналів, гальмування входу йонів Ca^{2+} в клітину, зниження активності глутамату і його рецептору (NDMA) і зменшення болю; зростає кількість ГАМК. Крім того, методи рефлексотерапії здатні справляти протективний ефект для шлунково-кишкового тракту, і захистити його від ульцерогенного побічного впливу індометацину.

(GABA) у цереброспінальній рідині і відбувається активація її рецептору.

Також у статті викладено основні теоретичні принципи методу «балансування гексаграм» та його практичну реалізацію. Крім того наведено клінічний випадок: хронічна пароксизмальна гемікранія у хворої при наявності супутнього захворювання - хронічного холециститу. Розглянуто клінічний діагноз. Викладено методи синдромальної акупунктурної діагностики, детально охарактеризовано складові синдромального акупунктурного діагнозу, дано опис акупунктурної корекції, розглянуто особливості «сприятливої» гексаграми.

Мета. Розглянути особливості застосування рефлексотерапії за методом «балансування гексаграм» в комплексній реабілітації хронічної пароксизмальної гемікранії.

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

Наукова новизна. Вперше в нашій країні використано методу складання акупунктурних рецептів і акупунктуру за методом «балансування гексаграм» в комплексній реабілітації хронічної пароксизмальної гемікранії.

Результати. В результаті лікування за методом "балансування гексаграм" стан хворої поліпшився:

Висновки. 1. У практиці невропатолога та рефлексотерапевта зустрічаються хворі з хронічною пароксизмальною гемікранією, причому методи рефлексотерапії ефективні, насамперед, коли цю проблему стимулюють психогенні фактори.

У комплексі лікувальних заходів хворих з хронічною пароксизмальною гемікранією ефективним може бути застосування акупунктурного методу «балансування гексаграм».

Ключові слова: хронічна пароксизмальна гемікранія, реабілітація, рефлексотерапія, метод «балансування гексаграм».

APPLICATION OF REFLEXOTHERAPY WITH THE "BALANCE OF HEXAGRAM" METHOD IN COMPLEX REHABILITATION FOR PAROXYSMAL HEMICRANIA

Abstract. The article raises the following topical issues - the topic of complex treatment of paroxysmal hemicrania. This pathology usually occurs in those people who have a reduced level of functioning of the antinociceptive systems, especially the opioid system, and who also have a history of damage to the nervous system (more often the central nervous system).

Chronic paroxysmal hemicrania, also known as Sjastad syndrome. It has been 40 years since chronic paroxysmal hemicrania was first described in 1974 by Sjastad and Dale. But if a means of its medical treatment was found (indomethacin at a dose of 150 mg per day or less), then the problem of side effects remains – ulcerogenic damage to the gastrointestinal tract due to long-term use of indomethacin. Thus, many patients do not want to take it for a long time. This is where reflexotherapy methods come to the aid of a practicing doctor.

Reflexotherapy methods are effective precisely in the presence of pain syndrome due to their powerful pain-relieving properties: under the influence of reflexology, afferent pain impulses are inhibited by blocking Na^+ channels, inhibiting the entry of Ca^{2+} ions into the cell, reducing the activity of glutamate and its receptor (NDMA), and reducing pain; the amount of GABA in the cerebrospinal fluid increases and its receptor is activated.

In addition, reflexotherapy methods are able to exert a protective effect on the gastrointestinal tract and protect it from the ulcerogenic side effects of indomethacin.

The article also outlines the main theoretical principles of the "balancing hexagrams" method and its practical implementation. In addition, a clinical case is given: chronic paroxysmal hemicrania in a patient with a concomitant disease - chronic cholecystitis. The clinical diagnosis was considered. The methods of syndromal acupuncture diagnosis are described, the components of syndromal acupuncture diagnosis are described in detail, the description of acupuncture correction is given, and the features of the "favorable" hexagram are considered.

Purpose. To consider the features of the use of reflexotherapy using the method of "balancing hexagrams" in the complex rehabilitation of chronic paroxysmal hemicrania.

Scientific novelty. For the first time in our country, the technique of compiling acupuncture prescriptions and acupuncture using the method of "balancing hexagrams" was used in the complex rehabilitation of chronic paroxysmal hemicrania.

Methods. We consider one clinical case of the use of reflexology using the method of "balancing hexagrams" in the complex rehabilitation of chronic paroxysmal hemicrania.

Used methods of clinical objective neurological examination, syndromic diagnosis method of traditional Chinese medicine, pulse diagnosis method, tongue diagnosis method.

Results. As a result of treatment using the "balancing hexagrams" method, the patient's condition improved: the frequency and intensity of headaches became less severe, side effects from taking indomethacin have eased.

Conclusions. 1. In the practice of a neuropathologist and a reflexologist, patients with chronic paroxysmal hemicrania are encountered, and reflexotherapy methods are effective, first of all, when this problem is stimulated by psychogenic factors.

2. In the complex of treatment measures for patients with chronic paroxysmal hemicrania, the use of the acupuncture method "balancing hexagrams" can be effective.

Key words: chronic paroxysmal hemicrania, rehabilitation, reflexotherapy, "balancing hexagrams" method.

Topicality. It has been 40 years since chronic paroxysmal hemicrania was first described in 1974 by Sjastad and Dale. But if a means of its medical treatment was found (indomethacin at a dose of 150 mg per day or less), then the problem of side effects remains – ulcerogenic damage to the gastrointestinal tract due to long-term use of indomethacin [5]. Chronic paroxysmal hemicrania refers to triad vegetative cephalgia. They account for about 3–8% of all hemicrania.

Complex treatment using reflexotherapy methods has been used for a long time, not only in the case of neurological diseases, with pain syndromes, when reflexotherapy is most indicated due to its powerful pain-relieving effects, but also in various disorders of internal organs [6, 7, 9, 10, 11]. Then (visceral pain) it is the most promising in terms of the use of reflexotherapy methods in the case of chronicity of the process, because there is a possibility of a differential approach to the formulation of acupuncture prescriptions (specific acupuncture meridians, acupuncture points depending on the localization of the process) [3].

Modern studies have really shown that reflexotherapy methods are effective in the complex treatment of many disorders of the gastrointestinal tract, including gastralgia, chronic cholecystitis, gastroparesis, gastritis, peptic ulcer disease [1]. Reflexotherapy is effective for many diseases of the gastrointestinal tract, because it is innervated mainly by the autonomic nervous system, but primarily when there is a psycho-emotional component (stress) in its etiology. Abundant vagal innervation of the gastrointestinal tract contributes to the fact that in some diseases (for example, chronic cholecystitis) excessive long-term irritation of the vagus nerve occurs, which can be one of the reasons for the occurrence and maintenance of cephalgia [1, 2, 8].

Presentation of the main material. The method of "balancing hexagrams" is one of the methods of compiling acupuncture prescriptions [12], 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 [12]. 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 [12].

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 "favorable" 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 [12].

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. It is necessary to make full use of the possibilities of the general action of the "favorable" hexagram. 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.

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) [12].

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 "favorable", they have privileges over other hexagrams of the I Ching [12].

Below, we would like to cite a clinical case where a complex approach was used to treat a patient with chronic paroxysmal hemicrania, using reflexotherapy methods, in particular the method of "balancing hexagrams".

Clinical case: patient V, 27 years old, consulted a neurologist and reflexologist in 2017, after she underwent a course of treatment by a neurologist and a reflexologist using basic neurological and reflexotherapy treatment, with complaints of attacks of burning pain in the area of the right eye and orbit. Attacks occur on average – 5–6 times a day, sometimes at night, more often – in cloudy weather. The duration of the attacks is about 25 minutes. Attacks are accompanied by lacrimation, redness of the right eye, sometimes – hyperemia of the right half of the face. In the anamnesis there is a closed craniocerebral injury.

She has been sick for about 3 years, the first 2 years of the disease had a clear seasonal nature (autumn-winter), in the last year pains were also noted in spring and summer, although their intensity during this period was less. There was no clear series of attacks (this speaks against "pure" cluster cephalgia, emphasizing the visceral nature of the headache).

In the neurological status: asymmetry of the eye slits (D<S), sensitivity on the face is not disturbed, slight pain upon palpation at the supraorbital point of the trigeminal nerve on the right (along the edge of the suprabrow arch).

After additional examination: ultrasound dopplerography of the vessels of the head and neck – venous outflow is slightly obstructed, more so in the vertebro-basilar basin on the right; ultrasound dopplerography of abdominal organs – chronic cholecystitis, nephroptosis on the right. Clinical tests of blood, urine, MRI data, EEG mapping, ECG are within normal limits. Pain research data on the VAS scale (during a pain attack) – 7 points.

Clinical diagnosis: chronic paroxysmal hemicrania on the right, moderately severe course; chronic cholecystitis, nephroptosis. Treatment (complex): indomethacin 25 mg x 3 times per day, acupuncture ("balancing hexagrams" method), laser acupuncture.

Acupuncture diagnosis: cephalgia due to liver YIN deficiency (main). The tongue was purple, with red spots, the tip of the tongue was red, its edges too, there was no plaque on the tongue, a stringy and rough pulse was observed. The pulse was maximal in II position (deep) on the left and minimal in II position (also deep) on the right, i.e. by the mechanism of "excessive" control by the liver on the spleen. So, the additional (syndromal) AP diagnosis was: "excessive" control by the grandfather over the grandson (due to the deficiency of YIN of the liver and hyperactivity of its YAN, and because of this – its influence on the spleen).

So, the "affected" acupuncture meridian is the liver meridian, and the "affected" hexagram is Kun, which corresponds to the Earth-YIN element. (Fig. 1).

We choose a "favorable" hexagram for this state: it is Xian, I Ching hexagram No. 31 (Fig. 2).

The general meaning of hexagram No. 31 Xian (interaction) in traditional Chinese medicine: "Lake and Mountain interact." Image: mixed influence of mountains and water.

Symbol: extreme sincerity affects even God. Strong desire. A place of transformation.

Feeling the movement of the spirit within. Combine what belongs to each other. Ancient

Wu contacts Shen in this hexagram. Heart Shen is full and moving with spirit. Avoid being influenced by others. Heavenly and earthly in harmony. Feel the Tao moving within you. Embrace YIN: Be open to receiving and imitating. Someone will help you along the way, someone you never considered important. Energy health systems must be efficient. Jian Chi's place. The place where the sun begins its movement each day.

Medical significance: 1) prognostic – infectious diseases; external causes of diseases; diseases of venereal origin; sexual excesses; internal Heat and external Cold; congenital diseases; 2) indications for acupuncture treatment – infectious diseases; sexual

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 12]

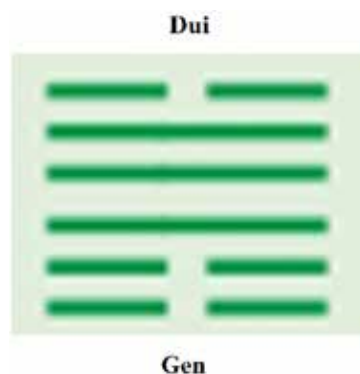


Fig. 2. The "favorable" hexagram for this condition is Xian, I Ching Hexagram No. 31 (with its upper trigram Dui and lower trigram Gen). [adapted by 12]

excesses; pain in the lower abdomen; internal Heat and external Cold; YIN deficiency; heaviness in the limbs; headache; food stagnation; liver damage; moist heat in the lower heater; complex treatment of diseases (drugs + acupuncture).

Evaluating hexagram No. 31 Xian positively, it should be noted that we, first of all, chose it for use according to the method of "balancing hexagrams" in the case of a complex approach to the treatment of the patient. The upper trigram of the Xian – Dui hexagram corresponds to "Metal", and its lower trigram – Gen – corresponds to "Earth" ("Metal" and "Earth" are "mother" and "son" according to Wu-Xing, and strong stimulation of "Metal" suppresses "Earth", which is necessary). Also, the acupuncture points that we used for impact correspond to the patient's symptoms, and the most effective time to use this hexagram for therapeutic purposes is the month of January.

Acupuncture recipe for this case (Fig. 3): the patient has problems on the right side (cephalgia on her right side), so we inject acupuncture points Liv 3, Liv 4, Liv 5 on the left side; on the right side, we prick the acupuncture points G 41, G 40, G 38 (a paired channel that enhances the treatment, the acupuncture points for influence are similar to the number of the lines of the "affected" hexagram). The acupuncture procedure according to the method of "balancing the hexagrams" was carried out 3 times during the course of treatment, which lasted 15 sessions. They also used a "nosological" acupuncture recipe, in particular the following acupuncture points:

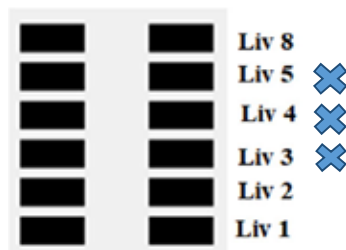


Fig. 3 Acupuncture points for exposure. We choose points corresponding to the "opposite" (on the "affected" hexagram in relation to the "favorable" hexagram) – 3, 4, 5 dashes for the acupuncture effect. [adapted by 12]

G 20, GV 20, EX 1, LI 4, TE 5, PC 7, Ht 7, SP 6, AR – 34, 35, 36, 96, 97, 100.

Catamnesis: after a course of treatment using reflextherapy methods, the patient's condition improved: the frequency and intensity of headaches became less severe, side effects from taking indamethacin have eased.

Conclusions. 1. In the practice of a neuropathologist and a reflexologist, patients with chronic paroxysmal hemicrania are encountered, and reflexotherapy methods are effective, first of all, when this problem is stimulated by psychogenic factors.

2. In the complex of treatment measures for patients with chronic paroxysmal hemicrania, the use of the acupuncture method "balancing hexagrams" can be effective.

Список використаних джерел:

1. Застосування рефлексотерапії в комплексному лікуванні захворювань шлунково-кишкового тракту / Мачерет Є.Л., Бабич Є.Х., Мойсеєнко Л.Ю., Коваленко О.Є., Чуприна Г.М. // Методичні рекомендації: Київ, КМАПО, 2000. – 15 с.
2. Мачерет Є. Л., Чуприна Г. М., Панікарський В.Г. [та ін.] Деякі механізми цефалгій (традиційні та сучасні погляди) / Збірник наук. пр. сп. КМАПО. – 2005. В. 14. К. 1. С. 703–708.
3. 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. 1008 с.
4. 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.
5. 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.
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., 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.
8. Чуприна Г., Свиридова Н., Ханенко Н., Середа 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.
9. 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.
10. Chinese acupuncture and moxibustion (2002). Sanghai: Publishing house of Sanghai University of TCM, 2002. 371 p.
11. 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 p.

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

References:

1. Zastosuvannya refleksoterapii v kompleksnomu likuvanni zachvoryuvan shlunkovo-kyshkovogo traktu (2000). [The use of reflexotherapy in the complex treatment of diseases of the gastrointestinal tract] / Macheret E., Babych E., Moiseyenko L., Kovalenko O., Chupryna G. [Metodychni rekomendatsii]. Kyiv, КМАРО, 2000. 15 с. [in Ukrainian].
2. Macheret E., Chupryna G., Panikarskiy V. [et al.] (2005). Deyaki mechanizmy tsefalgiy (tradytsiyni ta suchasni poglyady) [Some Mechanisms of Cephalgia (Traditional and Modern Views)] / Збірник наук. пр. сп. КМАПО. 2005. В. 14. К. 1. С. 703–708. [in Ukrainian].
3. Svyrydova N., Morozova O., Chupryna G. [et al.] (2017). Refleksoterapiya: pidruchnyk [Reflexotherapy: textbook]. Kyiv: TOV SIKGRUP Ukraine, V. 1. 3, 1108 p. [in Ukrainian].
4. Svyrydova N., Morozova O., Chupryna G. [et al.] (2023). Refleksoterapiya: pidruchnyk [Reflexotherapy: textbook]. Kyiv, 2023 : TOV TROPEA, V. 4, 220 p. [in Ukrainian].
5. Svyrydova N., Chupryna G., Parnikoza T. [et al.] (2023) Vybrani pytan zastosuvannya metodiv refleksoterapii u likuvanni bolovykh syndromiv [Selected issues of the application of reflexotherapy methods in the treatment of pain syndromes]. Kyiv, 2023 : TOV TROPEA, 202 p. [in Ukrainian].
6. Chupryna G. (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni zachvoruvan nervovoi systemy z bolovym syndromom [The use of reflexotherapy 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» (Florence, Italy, July 10–12, 2023), pp. 78–79 [in Ukrainian].
7. 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» Madrid, Spain (July 17–19, 2023), pp. 92–96 [in Ukrainian].
8. Chupryna G., Svyrydova N., Kchanenko N. [et al.] (2023). Vykorystannya refleksoterapii v kompleksnomu likuvanni chronichnogo choletsystytu z tsefalgichnym syndromom [The use of reflexotherapy 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].
9. 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.
10. Chinese acupuncture and moxibustion (2002). Sanghai: Publishing house of Sanghai University of TCM , 2002. 371 p.
11. Current research in acupuncture (2013) /Y. Xia [et al.]; eds. Y. Xia., G. Ding, G-C. Wu. New York: Springer science + Busness media, 2013. 31 p.
12. Twicken D. (2012). I Ching acupuncnure. The balance method /clinical applications of the Ba Gua I Ching/ London and Philadelphia: Singing Dragon, 2012. 275 p.