

Impact Factor: 5.723

ISSN: 2181-0982
DOI: 10.26739/2181-0982
www.tadqiqot.uz

JNNR

JOURNAL OF NEUROLOGY AND
NEUROSURGERY RESEARCH



VOLUME 4, ISSUE 3

2023

ЖУРНАЛ НЕВРОЛОГИИ И НЕЙРОХИРУРГИЧЕСКИХ ИССЛЕДОВАНИЙ

Бухарский государственный медицинский институт и tadqiqot.uz

Главный редактор:

Ходжиева Дилбар Таджиевна
доктор медицинских наук, профессор
Бухарского государственного медицинского
института. (Узбекистан).
ORCID ID: 0000-0002-5883-9533

Зам. главного редактора:

Хайдарова Дилдора Кадировна
доктор медицинских наук, профессор
Ташкентской медицинской академии.
(Узбекистан).
ORCID ID: 0000-0002-4980-6158

Рецензируемый
научно-практический журнал
“Журнал неврологии
и нейрохирургических исследований”
Публикуется 6 раза в год
№3 (04), 2023
ISSN 2181-0982

Адрес редакции:

ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
web: <http://www.tadqiqot.uz/>;
Email: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Макет и подготовка к печати
проводились в редакции журнала.

Дизайн - оформления:

Хуршид Мирзахмедов

Журнал зарегистрирован
в Управлении печати и
информации г. Ташкента Рег. №
от 01.07.2020 г.

“Неврологии и нейрохирургических
исследований” 3/2023

Электронная версия

журнала на сайтах:

<https://tadqiqot.uz>
www.bsmi.uz

РЕДАКЦИОННАЯ КОЛЛЕГИЯ:

Иноятов Амрилло Шодиевич - доктор медицинских наук, профессор, министр здравоохранения. (Узбекистан)

Хайдаров Нодиржон Кадинович – доктор медицинских наук, профессор, ректор Ташкентского государственного стоматологического института. (Узбекистан).

Нуралиев Неккадам Абдуллаевич - доктор медицинских наук, профессор, иммунолог, микробиолог, проректор по научной работе и инновациям Бухарского государственного медицинского института. (Узбекистан).

Кариев Гайрат Маратович – доктор медицинских наук, профессор, директор Республиканского научного центра нейрохирургии Узбекистана. (Узбекистан).

Федин Анатолий Иванович - доктор медицинских наук, профессор, заслуженный врач РФ. Российский национальный исследовательский медицинский университет имени Н.И. Пирогова. (Россия).

Маджидова Екутхон Набиевна - доктор медицинских наук, профессор, Ташкентского педиатрического медицинского института. (Узбекистан).

Рахимбаева Гулнора Саттаровна - доктор медицинских наук, профессор, Ташкентской медицинской академии. (Узбекистан).

Джурабекова Азиза Тахировна – доктор медицинских наук, профессор Самаркандского государственного медицинского института. (Узбекистан).

Чутко Леонид Семенович - доктор медицинских наук, профессор, руководитель Центра поведенческой неврологии Института мозга человека им. Н.П. Бехтеревой. (Россия).

Муратов Фахитдин Хайритдинович - доктор медицинских наук, профессор Ташкентской медицинской академии. (Узбекистан).

Дьяконова Елена Николаевна - доктор медицинских наук, профессор, Ивановская государственная медицинская академия. (Россия).

Труфанов Евгений Александрович – доктор медицинских наук, профессор Национальной медицинской академии последипломного образования имени П.Л. Шупика. (Россия)

Норов Абдурахмон Убайдуллаевич – доктор медицинских наук, профессор Ташкентского института усовершенствования врачей. Заместитель директора Республиканского специализированного научно- практического центра нейрохирургии. (Узбекистан)

Абдуллаева Наргиза Нурмаматовна – доктор медицинских наук, профессор Самаркандского государственного медицинского института. (Узбекистан).

Азизова Раъно Баходировна - доктор медицинских наук, доцент Ташкентской медицинской академии. (Узбекистан).

Давлатов Салим Сулаймонович - Начальник отдела надзора качества образования, доцент Бухарского государственного медицинского института. (Узбекистан).

Саноева Матлюба Жахонкуловна - доктор медицинских наук, доцент Бухарского государственного медицинского института. (Узбекистан).

Артыкова Мавлюда Абдурахмановна - доктор медицинских наук, профессор Бухарского государственного медицинского института. (Узбекистан).

Уринов Мусо Болтаевич - доктор медицинских наук, доцент Бухарского государственного медицинского института. (Узбекистан).

Киличев Ибодулла Абдуллаевич – доктор медицинских наук, профессор Ургенчского филиала Ташкентской медицинской академии. (Узбекистан).

Нарзуллаев Нуриддин Умарович – доктор медицинских наук, доцент Бухарского государственного медицинского института. (Узбекистан).

Рашидова Нилуфар Сафоевна - доктор медицинских наук, доцент Ташкентской медицинской академии. (Узбекистан).

Ганиева Манижа Тимуровна - кандидат медицинских наук, доцент Таджикского государственного медицинского университета (Таджикистан).

Хазраткулов Рустам Бафоевич - руководитель сосудистого отделения Республиканского специализированного научно – практического медицинского центра нейрохирургии, доцент кафедры нейрохирургии Центра развития профессиональной квалификации медицинских работников (Узбекистан).

Нуралиева Хафиза Отаевна - кандидат медицинских наук, доцент Ташкентского фармацевтического института. (Узбекистан).

<p>1. Xolmuminovna Utaganova Guljahon, Isanova Shoira To`lqinovna, Ergashev Suxrob Saidovich, Muxtarova Maftuna Alisherovna YANGI TUG'ILGAN SHAQALOQLARDA OG'RIQ SINDROMINING PATOGENETIK MEKANIZMI.....</p>	7
<p>2. Дилбар Таджиевна Ходжиева, Хайдарова Дилдора Кадировна, Барнаева Ситора Бахрамовна НЕВРОЛОГИЧЕСКИЕ ПРОЯВЛЕНИЯ ПОСТИНСУЛЬТНОЙ ЭПИЛЕПСИИ ПРИ ГЕМОРРАГИЧЕСКОМ ИНСУЛЬТЕ.....</p>	10
<p>3. Hakimova Sohiba Ziyodullayevna, Muzaffarova Nargiza Shuxratovna, Bakhramov Shohrux Fakhruddin ugli БАЗИЛЯР МИГРЕННИНГ ЗАМОНАВИЙ ДИАГНОСТИКАСИ (адабиётлар шархи).....</p>	14
<p>4. Абдуллаев Дониер Еркинжон угли, Югай Игорь Александрович ОСОБЕННОСТИ ТАКТИКИ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ТЕТРИНГ СИНДРОМА ПРИ СОЧЕТАННОЙ АНОМАЛИИ СПИННОГО МОЗГА.....</p>	17
<p>5. Khaidarov Nodirjon Kadirovich, Teshayev Shukhrat Jumayevich, Kamalova Malika Ixomovna RISK FACTORS AND MECHANISMS OF ONCOLOGY IN WOMEN (Literature review).....</p>	22
<p>6. Ишанходжаева Гулчехра Талиповна НЕЙРОПСИХОЛОГИЧЕСКОЕ ИССЛЕДОВАНИЕ КОГНИТИВНОЙ ДЕЯТЕЛЬНОСТИ У ДЕТЕЙ НЕЙРОСЕНСОРНОЙ ТУГОУХОСТЬЮ.....</p>	27
<p>7. Миррахимова Мактуба Хабибуллаевна, Ишанходжаева Гулчехра Талиповна ЖЕЛУДОЧНО-КИШЕЧНЫЕ ПРОЯВЛЕНИЯ ПРИСТУПОВ МИГРЕНИ У ДЕТЕЙ.....</p>	30
<p>8. Мухаммаджонова Дурдона Мухаммадjon кизи БОЛАЛАР ЦЕРЕБРАЛ ФАЛАЖЛИГИДА КОГНИТИВ БУЗИЛИШЛАР РЕАБИЛИТАЦИОН ДАВОСИНИ ОПТИМАЛЛАШТИРИШ.....</p>	33
<p>9. Рахматуллаева Гулнара Кутпитдиновна, Мирзаева Камола Сайдирахмановна, Кадырова Азиза Шавкатовна АНАЛИЗ РИСКА ВОЗНИКНОВЕНИЯ ОСТРОГО НАРУШЕНИЯ МОЗГОВОГО КРОВООБРАЩЕНИЯ НА ФОНЕ БЕРЕМЕННОСТИ.....</p>	38
<p>10. Рахматуллаева Гульнара Кутбитдиновна, Худаярова Севара Муратбековна, Холмуратова Бахтигул Нурмухаммат кизи ХРОНИЧЕСКАЯ БОЛЕЗНЬ ПОЧЕК (ХБП) КАК ФАКТОР РИСКА СОСУДИСТОГО РЕМОДЕЛИРОВАНИЯ И РАЗВИТИЯ ЦЕРЕБРОВАСКУЛЯРНОЙ ПАТОЛОГИИ.....</p>	42
<p>11. Ашрапов Жамшид Рауфович, Асадуллаев Улугбек Максудович РЕЗУЛЬТАТЫ ЛУЧЕВОЙ ТЕРАПИИ СУБТЕНТОРИАЛЬНЫХ ГЛИОМ ГОЛОВНОГО МОЗГА У ДЕТЕЙ.....</p>	47
<p>12. Матмуродов Рустамбек Жуманазарович, Умирова Сурайё Мамуржоновна COVID-19 ЎТКАЗГАН ДИАБЕТИК ПОЛИНЕЙРОПАТИЯЛИ БЕМОРЛАРДА КЛИНИК-НЕВРОЛОГИК, НЕЙРОФИЗИОЛОГИК БУЗИЛИШЛАР ВА КОМПЛЕМЕНТ С3 КОМПОНЕНТИНИНГ СОЛИШТИРМА ТАҲЛИЛИ....</p>	51
<p>13. Туракулов Уйгун Сагдуллаевич, Ризаев Жасур Алимжанович ВЛИЯНИЕ УРОВНЯ САМООЦЕНКИ НА ПЕРЕЖИВАНИЕ ЧУВСТВА ОДИНОЧЕСТВА В ПОДРОСТКОВОМ ВОЗРАСТЕ.....</p>	56
<p>14. Khodjieva Dilbar Tadjievna, Khaydarova Dildora Kadirovna, Khotamov Bekzodjon Farhodovich PSYCHO-VEGETATIVE DISORDERS IN THE INTERICTAL PERIOD WITH TENSION HEADACHE (LITERATURE REVIEW).....</p>	59
<p>15. Мамадалиев Дилшод Мухаммадалиевич, Якубов Жахонгир Баходирович, Асадуллаев Улугбек Махсудович ПЕРСПЕКТИВЫ ХИРУРГИИ С ПРОБУЖДЕНИЕМ В НЕДОМИНАНТНОМ ПРАВОМ ПОЛУШАРИИ ГОЛОВНОГО МОЗГА. ОБЗОР ЛИТЕРАТУРЫ.....</p>	63
<p>16. Ходжиева Дилбар Таджиевна, Хайдарова Дилдора Кадировна, Ходжаева Мухаббат Салимовна СОВРЕМЕННЫЕ ВЗГЛЯДЫ НА ЭТИОЛОГИЮ, ДИАГНОСТИКУ И ЛЕЧЕНИЯ ИШЕМИИ ВЕРТЕБРО-БАЗИЛЯРНОЙ НЕДОСТАТОЧНОСТИ (ЛИТЕРАТУРНЫЙ ОБЗОР).....</p>	72

17. Олмосов Равшан Шерхон угли, Якубова Мархамат Миракрамовна, Назарова Нигора Зикриллаевна ПОЛИСОМНОГРАФИЧЕСКАЯ ХАРАКТЕРИСТИКА НАРУШЕНИЙ СНА ПРИ ХРОНИЧЕСКОЙ ИШЕМИИ МОЗГА И УРОВЕНЬ МЕЛАТОНИНА В КРОВИ.....	77
18. Usmanova Gulchehra Erkinovna INSULT PATOGENEZIDA ANGIOGENEZ, NEYROGENEZ VA NEYROYALLIG'LANISH JARAYONLARINING O'ZIGA XOSLIGI.....	81
19. Bozorov Shaxobjon Ismatovich BIRLAMCHI BOSH OG'RIQLARIDAGI UYQU BUZILISHLARINING KLINIK AHAMIYATI VA TARQALGANLIK DARAJASI.....	86
20. Rahmatullaeva Gulnora Kutpitdinovna, Shoymardonov Kadirali Shavkatovich ANALYSIS AND DIAGNOSTIC CRITERIA OF RISK FACTORS FOR ACUTE CEREBRAL CIRCULATORY INSUFFICIENCY (LITERATURE REVIEW).....	89
21. Махмудова Лола Иззатиллоевна ИЧАК ТАЪСИРЛАНИШ СИНДРОМИДА РУҲИЙ-ҲИССИЙ ЎЗГАРИШЛАРНИ КЛИНИК УСУЛЛАР ЁРДАМИДА БАҲОЛАШ.....	93

УДК. 616.857-06: 616.891.6

Khodjieva Dilbar Tadjievna
 doctor of Medical Sciences, Professor
Khaydarova Dildora Kadirovna
 Tashkent Medical Academy
Khotamov Bekzodjon Farhodovich
 Bukhara State Medical Institute

PSYCHO-VEGETATIVE DISORDERS IN THE INTERICTAL PERIOD WITH TENSION HEADACHE
 (literature review)



<http://dx.doi.org/10.5281/zenodo.7979616>

ANNOTATION

Headache (cervical) pain affects more than half of the world's population, even once, but has experienced headache pain. Despite the increased interest and diversity of research, headaches, predominantly primary and migranous, tension headache, leave open for practitioners, diagnostic standards and difficulties, in some cases, not treatable.

Keywords: headache, migraine, cephalgic syndrome, psychoautonomic disorders

Ходжиева Дилбар Таджиевна
 доктор медицинских наук, профессор
Хайдарова Дилдора Кадировна
 Тошкентская медицинская академия
Хотамов Бекзоджон Фарходович
 Бухарский государственный медицинский институт

ПСИХОВЕГЕТАТИВНЫЕ РАССТРОЙСТВА В МЕЖПРИСТУПНОМ ПЕРИОДЕ С ГОЛОВНОЙ БОЛЬЮ НАПРЯЖЕНИЯ
 (литературный обзор)

АННОТАЦИЯ

Головной (цервикальная) болью страдает большая половина населения во всем мире, каждый человек хоть однократно, но испытывал головную боль. Несмотря на повышенный интерес и многообразия исследований, головные боли, преимущественно первичные и мигренозная головная боль напряжена, оставляют открытыми для практических врачей, диагностические стандарты и трудности, в некоторых случаях, не поддающиеся лечению.

Ключевые слова: головная боль, мигрень, цефалгический синдром, психовегетативные расстройства

Xodjiyeva Dilbar Tajiyevna
 tibbiyot fanlari doktori, professor
Xaydarova Dildora Kadirovna
 Toshkent tibbiyot akademiyasi
Xotamov Bekzodjon Farhodovich
 Buxoro davlat tibbiyot instituti

ZO'RIQISHDAGI BOSH OG'RIQLARIDA INTERSTITSIAL DAVRDA PSIXOVEGETATIV O'ZGARISHLAR
 (adabiyot sharhi)

ANNOTATSIYA

Dunyo aholisining katta qismi bosh og'rig'idan aziyat chekishadi, hayoti davomida har bir kishi kamida bir marta bo'lsa ham bosh og'rig'ini boshdan kechirgan. Tadqiqotchilarning qiziqishi va xilma-xilligiga qaramay, bosh og'rig'i, asosan birlamchi va migrenli bosh og'rig'iga bo'linadi. Amaliyotchilar uchun ko'p yechilmagan muammolar ochiq qoladi, buning oqibatida diagnostika standartlari va ba'zi hollarda davolanishga javob bermaydigan qiyinchiliklarga uchraydi.

Kalit so'zlar: bosh og'rig'i, migren, sefaljik sindrom, psixovegetativ kasalliklar

Relevance. Headache in humans is the most common complaint, which primary headache is 53.2% (with migraine - 35.2%, episodic tension headache - 18%, cervicogenic headache (CCH) - 13%), so far pathogenetic aspects of cephalgias remain little-studied. Although it is the cephalgias in many that require careful study with the beginning of

the examination and follow-up of patients. It is known that any pain syndromes are accompanied by the development of psycho-vegetative disorders. It is headache in elderly people that has been studied by various researchers, but in spite of that a lot of questions are still open for researchers and patients suffering from various cephalgias, psycho-

vegetative disorders in the interictal period remain understudied. There is also some interest in differential diagnostics of psycho-vegetative disorders inherent directly to adolescents with changes caused by cephalgic syndrome. Therefore, comprehensive investigation of the state of adaptive structures with the study of emotional disorders and vegetative disturbances, as well as their dependence on the pain syndrome is an urgent problem, because timely prescription of adequate therapy will improve the quality of life of adolescent headache sufferers. We have not found any studies of the autonomic nervous system using evoked cutaneous sympathetic potentials in various headaches in adolescents during the interictal period in the modern literature. In her 2010 study, S.E. Lapina studied autonomic regulation in adult patients with tension headache using the method of evoked cutaneous sympathetic potentials. As a diagnostic method, evoked cutaneous sympathetic potentials were used to study autonomic dysfunction in patients with panic disorder by Tooter N.V. in 2008. The method of evoked cutaneous sympathetic potentials is very effective in studying the autonomic nervous system as it allows revealing its dysfunction both at the central and peripheral levels. To date, there have been many studies of the postural system in various somatic pathologies, both in adults and adolescents. However, the state of coordinator function in various headaches during the interictal period has been practically not studied. This can be explained by the underestimation of the method of computerized stabilometry in the study of the pathogenesis of various somatic pathologies. The relationship of emotional and postural disorders in adults with the pathogenetic variants of tension headache has not yet been investigated. Additional neurophysiological criteria for two types of tension headache with pericranial muscle involvement and tension headache without pericranial muscle involvement have not been formed either. To date, it has been established that the most common somatic pathology in adults is headache. The increase in cephalgic syndrome among people is explained by the decrease in their quality of life. It is pointed out that the number of those suffering from headaches is much higher than in the statistics, which is explained by the impossibility to detect cephalgia in men in time. The authors explain this by men's inability to formulate their complaints. Among the factors provoking headaches, emotional overstrain, trauma, meteorological factors, disorder of nutrition and sleep regime were noted. Despite the fact that since the 19th century many Russian and foreign authors have studied various aspects of the cephalgic syndrome, the pathogenesis, etiology, and clinical differential diagnosis are still devoted to a few works.

Definition and classification of headaches

Headache is a symptom characterized by an unpleasant, painful sensation localized from the cervical-occipital region to the eyebrows. According to the adopted second, revised in 2003, and published in 2013 a new third version of the International Headache Classification, there are three main parts and 14 types of headaches. Primary headaches include migraine headache, tension headache, and trigeminal autonomic neuralgia. Secondary forms of headache include headaches, including cervicogenic headaches (CCH) associated with head and neck trauma, with cerebral and neck vascular lesions, as well as non-vascular intracranial lesions: taking various substances or their withdrawal, with infections, with homeostasis disruption. Headaches and facial pain associated with pathology of the skull, neck, eyes, ears, nasal cavities and sinuses, teeth, oral cavity, as well as headaches associated with mental illnesses are singled out separately. The group of painful cranial neuropathies includes cranial neuralgia and central facial pain, both of specified and unspecified etiology. Definition, classification, etiology, and pathogenesis of tension headache. Tension headache is manifested by prolonged bilateral pains of moderate intensity, often against the background of emotional stress, lasting from 30 minutes to 7 days and is often accompanied by pericranial muscle tension. Tension headache is characterized by monotonous, squeezing, constricting, dull pain. The pain in tension headache is localized in the frontal and temporal or cervical-occipital regions. Unilateral localization is rare.

Classification of tension headaches

(International Classification of Headache ICGB).

Infrequent episodic tension headache;

Infrequent episodic tension headache combined with pericranial muscle tension;

Infrequent episodic tension headache not combined with pericranial muscle tension;

Frequent episodic tension headache;

Frequent episodic tension headache combined with pericranial muscle tension;

Frequent episodic tension headache not combined with pericranial muscle tension;

Chronic tension headache;

Chronic tension headache combined with pericranial muscle tension;

Chronic tension headache not combined with pericranial muscle tension;

Possible tension headache;

Possible infrequent tension headache;

Possible frequent tension headache;

Possible chronic tension headache;

Frequent episodic tension headache, characterized by the presence of a pain syndrome no more than 15 times per month. Rare episodic tension headache, characterized by the presence of one episode of headache per month. A tension headache is considered chronic if the number of attacks is 15 per month and more than 180 per year. The most common cause of tension headaches is excessive physical, mental load, exercise at night, fatigue, forced hunger, prolonged emotional stress, as well as frequent stay in a static posture with prolonged muscle tension. Three theories of tension headache have been described: myofascial, psychogenic, biochemical. The theory of myofascial pain is the most widespread.

The initial stimulus is thought to be acute or chronic muscle overload, which is the source of increased pain afferentation. Prolonged pain irritation leads to a nonspecific inflammatory response. This in turn leads to vasodilation and release into the interstitium of chemical mediators of pain, such as serotonin, histamine, Substance P, bradykinin, and products of cyclooxygenic and lipooxygenic metabolism of arachidonic acid. Accumulation of mediators maintains reflex contraction of the muscle and blood flow in the spasmed muscle is impaired. All this leads to sensitization of nociceptors with high excitability threshold. Under these conditions, trigger points are formed. Sensitization of peripheral neurons affects the state of central nervous system neurons. There arises central sensitization and, eventually, a decrease in the excitability threshold. This results in pathological pain response - hyperalgesia. In the pathophysiology of tension headache, attention is also paid to the dysfunction of endogenous mechanisms of antinociceptive control, as well as changes in reactivity of structures of the limbico-reticular complex, which is confirmed by detectable psychovegetative disorders. This leads to an intensification of pain and eventually to impairment of psychomotor correlation. The biochemical theory of tension headache pathogenesis is characterized by decreased serotonin levels, as well as decreased activity of the central opioid system. Also in the pathogenesis of episodic tension headache plays a role and low levels of magnesium. Its role is to regulate the functioning of neuromuscular tissue, is involved in myocyte relaxation, being a calcium antagonist. Thus, magnesium deficiency contributes to the tonic state of muscles, which eventually causes headaches. The pathogenesis of tension headache is also affected by the participation of magnesium ions in the synthesis of ATP in the mitochondria of cells. This mechanism consists in the accumulation of macroergic compounds. This is necessary to maintain the functional reserve of all systems of the body and develop their adaptive reactions. A decrease in energy potential occurs with magnesium deficiency. Ultimately, this leads to a decrease in resistance of the nervous system to stress, and as a consequence, to malfunction of the hypothalamic-pituitary system. Thus, pathogenesis of tension headache is caused by tension of pericranial muscles and a complex of neurochemical reactions.

Definition, classification, etiology, and pathogenesis of cervicogenic headache

According to the International Classification of Headaches, cephalgia associated with pathology in the neck region is cervicogenic headache subtype. It is known that the etiology and pathogenesis of

cephalgia are directly related to disorders in the cervical region. According to the current literature, cervicogenic headache is a complex of symptoms whose etiology and pathogenesis are associated with pathological changes in the cervical spine. Cervicogenic headache is characterized by cervico-occipital localization. More often the headaches are unilateral, of moderate intensity. As a rule, the pain syndrome occurs in the morning, after sleeping. The pain worsens after a long stay in one position. An attack of cervicogenic headache lasts from one to six hours. Pathological changes in the cervical spine are accompanied by stiffness and limitation of the amount of movement in it. It has been established that the source of cervicogenic headache may be neural roots, nerves, anatomical formations of the spinal column - uncovertebral articulations, intervertebral discs, ligaments, cervical muscles, tendons and joints of the cervical spine. The pathogenesis of cervicogenic headache is very complex. To date, there are three theories of the mechanism of cervicogenic headache. One of the most common is the theory of muscle tension. It is known that the basis of pain syndrome in the cervicogenic region, is myofascial dysfunction developed as a result of the impact on nociceptors at the level of the cervical spine, aggravates the pain syndrome. The pain develops through a segmental-reflex mechanism. At the same time, trigger points localized in the muscles of the shoulder girdle and neck trigger the muscle-tonic mechanism that intensifies the pain. In addition, the activation of the sympathoadrenal system is considered to be the cause of muscle spasm. It has also been pointed out that the leading mechanism of headache in children is vascular. Studies conducted at the Research Institute of Traumatology and Orthopedics of Donetsk National Medical University named after M. Gorky have shown that children with cervical spine instability develop hemodynamic disorders in the cervical spine and spinal cord, as well as in the brain. As a result of instrumental diagnostic methods, hemodynamic abnormalities were found in up to 43.3% of children. Every third patient had an S-shaped deformity of the vertebral arteries; asymmetry of blood filling of the vertebral arteries was detected in 80% of children. At the same time, congestion was observed in 62% of the studied children.

Disturbance of hemodynamic processes in the vertebral arteries is explained by the presence of dysplastic processes in the cervical spine. In addition, impaired blood flow in the vertebral arteries can be caused by Kimmerly anomaly, in which the vertebral artery is compressed and its sympathetic structures in the altered sulcus for vertebral artery, uncovertebral arthrosis, Clippel-Fail syndrome. According to the current literature, the neuralgic mechanism has a major influence in the development of CGD. Studies show that developmental abnormalities of the cervical spine result in compression of the trigeminocervical complex. The three upper cervical segments and the trigeminal spinal tract are known to overlap. Therefore, the pain syndrome may be localized in different regions of the cervical fields. But its localization between the cervical and trigeminal areas is possible. It should be noted that the frontal localization of the pain syndrome is due to compression of the ophthalmic branch of the trigeminal nerve. It is not excluded that the pain also spreads along the maxillary and mandibular branches of the trigeminal nerve. Painful pericranial muscular areas have been identified in persons with bite disorder. At the initial stage of CGD, the pain syndrome may be bilaterally localized due to compression of the

great occipital nerve. Many authors have proposed the theory of neurovascular conflict. This theory is that the ventral portion of the superior cervical segment of the vertebral artery compresses the C2 root. Compression of the venous plexus of the root and C2 ganglion should also be considered. As a result of irritation of the sensory nerve roots and sympathetic nerves, there is reflex tension of the muscles of the neck and occipital area, with the appearance of pain syndrome.

Cervicogenic headache can be a consequence of traumatic damage to the cervical spine, more often a "whiplash" injury. The occurrence of headache after "whiplash" injury of the cervical spine ranges from 37 to 82%. The mechanism for the development of CCH in this case is muscle spasm and neuralgia of the great occipital nerve. All types of tension headache are divided into two subtypes - with involvement of pericranial muscles and without involvement of pericranial muscles. The concept of episodic tension headache with pericranial muscle involvement is not at all questionable, because the development of episodic tension headache is associated with tension of the neck, face, and scalp muscles. Episodic tension headache without pericranial muscle involvement is accompanied by tenderness on palpation of pericranial tissues, and impaired nociceptive and antinociceptive relationships, which often causes emotional distress and discomfort in the pericranial muscles.

Peculiarities of headache

Pain is a condition characterized by an emotional experience and there is definitely actual or possible tissue damage (as defined by the International Association for the Study of Pain (IASP)).

Over the past two decades, a great deal of scientific work has been done on the diagnosis and treatment of headaches. It is known that a significant increase in headaches in both adults and children is prevalent throughout the world. The approach to the diagnosis and treatment of headaches in children and adolescents is very complex. Studies confirm that the prevalence of headaches is predominant in adolescence. According to population studies in Uzbekistan headaches affect many, the most common is migraine, as well as episodic tension headache - 18%. A large number of studies on the study of tension headaches show its significant predominance in adolescents when compared to other types of headaches. Many neurologists believe that tension headaches have a psychogenic origin and view them as a psychosomatic pathology. Psychosocial factors are the reason for the formation of the chronic form of tension headache are unfavorable living conditions at work, family.

Conclusions: A lot of works are devoted to the study of the relationship of tension headache and mental disorders. At the same time, it is worth noting that episodic headache has a connection with mental disorders. In particular, chronic tension headache is a constituent symptom of mental disorders, such as depression. We cervicogenic headache as possibly a variant of tension headache with involvement of pericranial muscles, as it is difficult to distinguish them clinically. One of the causes of cephalgic syndrome in adults is cervical spine instability. In our opinion, then, there is a version of a secondary or mixed genesis of tension headache. The main causes of tension headache with involvement of pericranial muscles are pathological changes in the anatomical structures of the cervical spine. The pathological process must be localized in the spinal-motor segment C1-C2. With this localization, pain irradiates to cranial structures.

Literature:

1. Casula EP, Leodori G, Ibáñez J, Benussi A, Rawji V, Tremblay S, Latorre A, Rothwell JC, Rocchi L. The Effect of Coil Orientation on the Stimulation of the Pre-Supplementary Motor Area: A Combined TMS and EEG Study. // *Brain Sciences*. 2022; 12(10):1358.
2. Rajain M, Bhatia R, Tripathi M, et al. Low-Frequency Repetitive Transcranial Magnetic Stimulation for Chronic Tension-Type Headache: A Randomized Controlled Study. // *Cureus*, 2023, № 15(2): e34922. doi:10.7759/cureus.34922
3. Закирова Э.Н. Качество жизни больных мигренью и головными болями напряжения // Автореф. дис. ... к.м.н., Пермь, 2009 23 с.
4. Насридинова Шахноза Ибрагимовна, Хайдарова Дилдора Кадиоровна, Ихтиярова Гулчехра Акмаловна. Психологическое влияние карантинных мер covid-19 на матерей в послеродовом периоде. *Журнал неврологии и нейрохирургических исследований*. №1. 2020 С. 25-28.
5. Ilkhomovna, K. M., Eriyigitovich, I. S., & Kadyrovich, K. N. (2020). Morphological Features Of Microvascular Tissue Of The Brain At Hemorrhagic Stroke. *The American Journal of Medical Sciences and Pharmaceutical Research*, 2(10), 53-59.
6. M. I. Kamalova, N.K. Khaidarov, Sh.E. Islamov, Pathomorphological Features of hemorrhagic brain strokes, *Journal of Biomedicine and Practice* 2020, Special issue, pp. 101-105

7. Kamalova M., Khaidarov N., Shomurodov K. Microscopic examination of brain tissue in hemorrhagic stroke in Uzbekistan //Материали конференцій МЦНД. – 2021.
8. Kamalova, M., Ismatova, S., Kayumova, S., Gulomova, S., & Akhmedova, J. (2021). Blood supply to the shoulder and forearm muscles in the human foetus. Збірник наукових праць ЛОГОС.
9. Khaidarov Nodir Kadyrovich, Shomurodov Kahramon Erkinovich, &Kamalova Malika Ilhomovna. (2021). Microscopic Examination OfPostcapillary Cerebral Venues In Hemorrhagic Stroke. The American Journal of Medical Sciences and Pharmaceutical Research, 3(08), 69–73.
10. Ходжиева, Дилбар Таджиевна; Бобокулов, Гулмурод Дилмуродович; Хайдарова, Дилдора Кадировна. Инсульт турли шаклларида қийсий ташхислаш мезонлари. Журнал неврологии и нейрохирургических исследований. №1. 2021/6/16.
11. Рахматова, ДИ; Пулатов, СС; Ходжиева, ДТ. Особенности клиники и диагностики эпилепсии у подростков. Медико-биологические, клинические и социальные вопросы здоровья и патологии человека. 2016. С.190-192.
12. Khodjjeva D. T., Khaydarova D. K., Khaydarov N. K. Complex evaluation of clinical and instrumental data for justification of optive treatment activites in patients with resistant forms of epilepsy. American Journal of Research. USA. № 11-12, 2018. С.186-193.
13. Khodjjeva D. T., Khaydarova D. K. Clinical and neuroph clinical and neurophysiological ch ogical characteristics of teristics of post-insular cognitive disorders and issues of therapy optimization. Central Asian Journal of Pediatrics. Dec.2019. P 82-86
14. Sadridin Sayfullaevich Pulatov. (2022). Efficacy of ipidacrine in the recovery period of ischaemic stroke. World Bulletin of Public Health, 7, 28-32.
15. Sadridin Sayfullaevich Pulatov. A Randomised Pilot Study Of Cardiovascular Patients With Hemispheric Ischaemic Stroke Against A Background Of Early Verticalisation- Web Of Scientist: International Scientific Research ..., 2022
16. Sadridin Sayfullaevich Pulatov. (2022). Verticalization of Patients with Severe Acquired Brain Injury: A Randomized Pilot Study. Eurasian Medical Research Periodical, 9, 46–48.
17. Ostchega Y., Dillon C.F., Hughes J.P. et al. Trends in hypertension prevalence, awareness, treatment, and control in older U.S. adults: data from the National Health and Nutrition Examination Survey 1988 to 2004. J Am Geriatr Soc. 2007; 55(7):
18. Holmegard H.N., Nordestgaard B.G., Jensen G.B. et al. Sex Hormones and ischemic stroke: A prospective cohort study and meta-analyses. J Clin Endocri-nol Metab. 2016; 101(1): 69-78. DOI: 10.1210/jc.2015-2687.