

MULTIPLE ORGAN FAILURE IN CHILDREN WITH BURNS

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Abstract. *A burn is a dangerous skin injury that affects not only the skin but also other organs. Burns in particular cause damage to kidneys, heart, metabolism, increase in body temperature, vomiting and other complications. What to do when burned, how to give first aid to an injured person? After all, the condition of a person and even his life depends on the provided first aid.*

Keywords: *burn types, degrees and first aid methods, How to provide first aid for burns, It is not possible to burn at all, How to provide first aid for burns?*

A burn is a traumatic injury of tissues as a result of chemical and thermal effects. Burns with high temperature are often observed when there is a fire, in contact with hot objects, water, oil, etc. A chemical burn occurs when alkali, acid and heavy metal salts fall on the skin. It is the burn that takes the second place among the injuries that cause human death, often people around the burned person cannot provide first aid in time and in the right way. That's why everyone should know elementary first aid measures for burns. If the burning process is observed, the first thing to do is to call an ambulance. Until they arrive, some actions should be taken to improve the patient's condition:

Chemical burn

It is necessary to remove the source of injury, remove burnt clothes;

It is necessary to freeze the burned area for 10-20 minutes (long-term freezing causes a strong spasm of blood vessels, disrupts blood supply), which reduces the depth of the skin burn, tissue damage and pain. Freezing the burned area is done only 2 hours after the burn;

Anesthesia, after which a sterile bandage should be applied to the burned area, if the burn covers a large area, it should be covered with a clean blanket;

For first-degree burns, special burn agents can be used. If a young child is burned, care should be taken when processing the skin. Antiseptic is the most important measure to be taken in case of burns in children. Parents always ask questions, how to neutralize blisters that appear after burns and how to reduce pain? Forget about brilliant green (Brilliantovyy zelyonyy) and iodine solution, such means have an irritating effect on the delicate skin of the child. Therefore, current pediatricians recommend using solutions of silver salts as an antiseptic agent. For example, the drug "Sulfargin" protects against bacteria, accelerates the process of regeneration (healing) and is suitable for any children's skin.

Absolutely impossible when burned!

Wash the affected area with vegetable oil and starch;

Use of alcohol preservatives, iodine, etc.;

Independently "crack" blisters on the skin;

Independent removal of clothes stuck to the skin;

Apply ointment to the burned area;

Using urine to speed up the process of elimination.

Also read this article: [What is the role of chemotherapy in oncological diseases?](#)

Burn classification and its degrees

I degree burn

This type of burn is observed when in contact with objects and liquids with a temperature of 50-70 degrees. In this case, the burn covers the surface layers of the skin. First degree burns are not very dangerous. In such a burn, the skin area becomes red, sore and painful. First of all, it is necessary to freeze the burned area and treat it with an antiseptic agent. In this case, folk remedies can be used. Usually, the rash fades after a few days, leaving an area of skin with a loss of pigmentation. If the burn covers 25% of the skin area, first aid as described above is required.

II degree burn

Second degree burns are observed when the skin is in contact with objects of 70-100 degrees. This level of burn can include any type of respiratory tract burn. Visible reddening of the skin occurs, and after a couple of hours blisters appear, filled with fluid. After the bursting of blisters (independently, without mechanical effects), a red spot remains on the skin. It usually takes two weeks for the wound to heal, unless the wound is infected.

Different types of ointments and oils cannot be used for burns of this level, and it is not recommended to use folk remedies on their own. Although such tools significantly reduce pain, they can create a fertile environment for infectious bacteria, which can interfere with wound healing. After a burn, it is necessary to call an ambulance, until help arrives, a sterile dry bandage should be applied to the injured area. So, second degree burns begin to heal after 14 days, any burns of the respiratory tract are included in second degree burns.

III and IV degree burns

In III and IV degree burns, severe damage to skin tissues and muscles, their anatomical and functional disorders are observed. When a large area is burned, the outcome is often fatal. At this level of burn, the injured patient goes into burn shock, because the patient feels very strong, unbearable pain, as a result of which he loses consciousness and does not feel the environment. In a state of shock, blood pressure drops, the number of pulses increases. This condition is caused by 10 to 30 percent injury of the skin area with oil, steam, and boiling water. Damaged skin develops deep wounds, and when the skin heals, a visible scar remains. In some cases, the patient becomes disabled.

In IV degree burns, the skin layer is damaged, subcutaneous tissue, muscles and even bones are damaged. In this case, the patient does not feel pain, because the nerve endings are also damaged. In some cases, doctors have to amputate (cut off) the affected arm or leg. If extensive burns are observed, it is absolutely impossible to take measures on your own!

If the injured person is unable to move on his own, it is required to lift him, in which case it is necessary to protect the affected areas with blankets. Calling for medical help, the patient will need to take painkillers and drink more fluids.

What can be done if there is a burn from hot water?

Scalding from hot water

Clothes spilled with boiling water should be removed;

It is necessary to determine the degree of burned skin (the human palm is considered 1%). In the burned area of more than 10%, i.e. equal to 10 palms, it is necessary to seek emergency medical help;

Treatment of the injured area with "Panthenol" solution;

If the burned area is on the hand, the hands should not be held down to reduce swelling;

In case of first and second degree burns, a bandage soaked in cold water should be applied to the injured area of the skin. The bandage is changed every two to three minutes (for 20 minutes, if the skin is intact);

If blisters appear, do not try to pop them on your own;

What to do with a steam burn?

It is necessary to cool the injured area, take off warm clothes;

When more than 10% of the skin area is damaged, it is necessary to consult a doctor;

It is impossible to rub oil on the burned area, burst blisters, or even touch them with your hands.

How to help with oil burns?

to burn

Hold the skin area where the oil has fallen in cold running water;

If the area burned with oil is more than 1% or the oil has come into contact with the eyes, it is necessary to consult a doctor immediately. A sterile bandage should be applied to the injured area until the doctor. Analgesics can also be used (if you are qualified for this): novocaine solution (4-5%), lidocaine, albutcid solution (10-20%), levomycetin (0.2%) solution.

What to do when burned with an iron?

Oil or glycerin is applied to the affected area;

Put beets and cabbage on the injured area and change it every 10 minutes;

Cooling the area with water and sprinkling soda;

It is also possible to treat the burnt area with raw chicken egg.

If the burn is accompanied by the formation of blisters, do not use the above procedures, consult a doctor!

What should be done if a chemical burn occurs?

Treatment for chemical burns depends on the nature of the chemical. Of course, an ambulance is called for first aid. Undress or cut off the affected area until help arrives. To remove the harmful substance, it is kept under cold running water for 20-30 minutes. If the burn is caused by an unknown chemical substance, it is better not to keep it under running water, because water can intensify the effect of the chemical substance. If the caustic substance is sulfuric acid, it should be soaked with a dry cloth while wearing rubber gloves. Only after that, it is necessary to rinse with running water and apply a dry sterile bandage.

In this case, medicinal preparations are prescribed by a doctor, because they can react with a chemical substance and cause serious complications. If the nature of the chemical substance is clear, for example, when burned with an acid, it can be washed with a 2% soda solution, if the chemical substance is an alkali - with water with added boric acid or with citric acid. Then a dry and sterile bandage should be applied.

First aid for burns.

Any regeneration-enhancing drugs are strictly prescribed by a doctor. Usually, a long period of time is required for the treatment of such a burn, treatment procedures can be external and internal. In order to improve the patient's condition, speed up the healing process, cool and soften the skin, aloe leaf is applied to the injured area. Vitamin E also promotes local regeneration of damaged areas and reduces scarring. For internal treatment, vitamins E, A, C, B are prescribed in the form of capsules.

Folk remedies for burns

As mentioned above, in folk medicine, it is possible to use the means only for burns of the first degree, injuries of the skin covering that are not large in size.

Applying raw potatoes, pumpkin, and carrots to the burned area also helps. Any vegetable is grated and put on the burn with a sterile bandage. It is recommended to soak the bandage for 10-15 minutes;

Another effective method is to make poultices with solutions of namatak and oak root to prevent pain and redness. For this, it is enough to soak the finished solution in gauze and attach it to the burned area. The dressing is changed every 15 minutes;

Dairy products are also good pain relievers. 3 times a day, for half an hour, the burned area should be massaged with kefir or sour cream;

Honey has been known since ancient times to have a bactericidal effect. It has the property of reducing pain, restoring regeneration;

Be careful when using hot and boiling items, take precautions when using chemicals, always be aware. If a burn occurs, follow the above instructions and seek medical attention.

REFERENCES

1. Мурадова Р. и др. Особенности диагностики и лечения без болевой ишемии миокарда // Журнал проблемы биологии и медицины. – 2016. – №. 4 (91). – С. 174-179.
2. Нуралиева Рано Матъякубовна, Тураев Хикматулло Негматович, Сиддиков Олим Абдуллаевич ЭФФЕКТИВНОСТЬ ПРИМЕНЕНИЯ ЛАНТОРОЛА В ТРЕХКОМПОНЕНТНОЙ АНТИХЕЛИКОБАКТЕРНОЙ ТЕРАПИИ С ИСПОЛЬЗОВАНИЕМ ПРОПОЛИСА // Вопросы науки и образования. 2020. №37 (121). URL: <https://cyberleninka.ru/article/n/effektivnost-primeneniya-lantorola-v-trehkomponentnoy-antihelikobakternoy-terapii-s-ispolzovaniem-propolisa> (дата обращения: 13.02.2023).
3. Нуралиева Рано Матъякубовна Эффективность применения препаратов цинка в комплексной терапии неотложных состояний у детей // Достижения науки и образования. 2020. №5 (59). URL: <https://cyberleninka.ru/article/n/effektivnost-primeneniya-preparatov-tsinka-v-kompleksnoy-terapii-neotlozhnyh-sostoyaniy-u-detey> (дата обращения: 13.02.2023).
4. Muxammadievich H. M. et al. BURN SHOCK IN PEDIATRIC AFTER THERMAL INJURY AND MULTIPLE ORGAN FAILURE SYNDROMES // World Bulletin of Public Health. – 2022. – Т. 8. – С. 140-142.
5. Сиддиков Олим Абдуллаевич, Нуралиева Рано Матъякубовна РАЦИОНАЛЬНОЕ ИСПОЛЬЗОВАНИЕ И ОПТИМАЛЬНОЕ ДОЗИРОВАНИЕ АНТИБАКТЕРИАЛЬНЫХ ПРЕПАРАТОВ ПРИ ЛЕЧЕНИИ ВНЕБОЛЬНИЧНОЙ ПНЕВМОНИИ // Вопросы науки и образования. 2021. №9 (134). URL: <https://cyberleninka.ru/article/n/ratsionalnoe-ispolzovanie-i-optimalnoe-dozirovanie-antibakterialnyh-preparatov-pri-lechenii-vnebolnichnoy-pnevmonii> (дата обращения: 13.02.2023).
6. Сиддиков Олим Абдуллаевич, Тураев Хикматилло Негматович, Нуралиева Рано Матъякубовна Эффективность применения препаратов железа у детей с признаками железodefицитной анемии // Достижения науки и образования. 2020. №5 (59). URL: [https://cyberleninka.ru/article/n/effektivnost-primeneniya-preparatov-zheleza-u-detey-s-](https://cyberleninka.ru/article/n/effektivnost-primeneniya-preparatov-zheleza-u-detey-s)

- priznakami-zhelezodefitsitnoy-anemii (дата обращения: 13.02.2023). Нуралиева Рано Матъякубовна, Сиддиков Олим Абдуллаевич, Тураев Хикматилло Негматович Оценка эффективности традиционной антихеликобактерной фармакотерапии при дополнительном использовании прополиса // Вестник науки и образования. 2020. №10-3 (88). URL: <https://cyberleninka.ru/article/n/otsenka-effektivnosti-traditsionnoy-antihelikobakternoy-farmakoterapii-pri-dopolnitelnom-ispolzovanii-propolisa> (дата обращения: 13.02.2023).
7. Нуралиева Рано Матъякубовна Применение Энтерола для устранения дисбактериоза и диарей различного происхождения у детей // Вопросы науки и образования. 2019. №28 (77). URL: <https://cyberleninka.ru/article/n/primenenie-enterola-dlya-ustraneniya-disbakterioza-i-diarey-razlichnogo-proishozhdeniya-u-detey> (дата обращения: 13.02.2023).
 8. Аралов Н. и др. Современные аспекты патогенеза экзогенного аллергического альвеолита //Журнал проблемы биологии и медицины. – 2015. – №. 3 (84). – С. 117-121.
 9. Аллазов С. А., Камалов Н. А., Мурадова Р. Р. ЖИСТКОСТНЫЕ ОБЪЕМНЫЕ ОБРАЗОВАНИЯ ПОЧЕК (ОБЗОР ЛИТЕРАТУРЫ) //ЖУРНАЛ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ И УРО-НЕФРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2021. – Т. 2. – №. 1.
 10. Мурадова Р. Р., Хайдаров М. М., Бегнаева М. У. СОВРЕМЕННЫЕ КЛИНИКО-ФАРМАКОЛОГИЧЕСКИЕ АСПЕКТЫ ПРИМЕНЕНИЯ НЕФРОТОКСИЧНЫХ АНТИБИОТИКОВ //Достижения науки и образования. – 2021. – №. 3. – С. 98-100.
 11. Odilovna K. F. et al. CLINICAL, HEMODYNAMIC AND GENETIC ASPECTS OF THE DEVELOPMENT OF UNSTABLE VARIANTS ANGINA IN YOUNG MEN //European Journal of Molecular & Clinical Medicine. – 2021. – Т. 7. – №. 09. – С. 2020.
 12. Rustamovna M. R., Matyakubovna N. R., Muxammadievich K. M. Optimization of Ways to Clear Burn Wounds from Purulent-Necrotic Masses in Children //Research Journal of Trauma and Disability Studies. – 2022. – Т. 1. – №. 12. – С. 137-140.
 13. Меликова Д. У. и др. СОВРЕМЕННЫЕ ВЗГЛЯДЫ ФАРМАКОТЕРАПИИ ПРИ НАРУШЕНИИ СНА //ББК 30.16 Б 63. – 2022. – Т. 3. – С. 107.
 14. Shakirov V. M., Muradova R. R., Haydarov M. M. Evaluation of the Effectiveness of the Use of “Непа-Merz” in Burn Disease //Journal of Pharmaceutical Research International. – 2022. – Т. 34. – №. 32A. – С. 32-36.
 15. Шавази Нурали Мамедович, Ибрагимова Марина Федоровна, Лим Максим Вячеславович, Тошева Хабиба Хабибулло Кизи, Жураева Барно Гулом Кизи ПРИМЕНЕНИЕ ПРЕПАРАТА ЭНТЕРОЛ ПРИ ДИАРЕЯХ У ДЕТЕЙ // Достижения науки и образования. 2021. №3 (75). URL: <https://cyberleninka.ru/article/n/primenenie-preparata-enterol-pri-diareyah-u-detey> (дата обращения: 13.02.2023).
 16. Рано Матъякубовна Нуралиева, Раиля Рустамовна Мурадова ЭФФЕКТИВНОСТЬ ПРЕПАРАТА ГАЛСТЕНА ДЛЯ ЛЕЧЕНИЯ ДЕТЕЙ С ЗАБОЛЕВАНИЯМИ ПЕЧЕНИ // Academic research in educational sciences. 2021. №11. URL: <https://cyberleninka.ru/article/n/effektivnost-preparata-galstena-dlya-lecheniya-detey-s-zabolevaniyami-pecheni> (дата обращения: 13.02.2023).
 17. Мурадова Раиля Рустамовна, Хайдаров Мусомиддин Мухаммадиевич КЛИНИКО-ФАРМАКОЛОГИЧЕСКИЕ АСПЕКТЫ ПРИМЕНЕНИЯ ГОРМОНАЛЬНЫХ ПРЕПАРАТОВ В ОФТАЛЬМОЛОГИИ // Достижения науки и образования. 2021. №3

- (75). URL: <https://cyberleninka.ru/article/n/kliniko-farmakologicheskie-aspekty-primeneniya-gormonalnyh-preparatov-v-ofthalmologii> (дата обращения: 13.02.2023).
18. Мурадова Раиля Рустамовна, Хайдаров Мусомиддин Мухаммадиевич, Омонов Элбек Мехроджович ОПТИМИЗАЦИЯ ТЕРАПИИ БОЛЬНЫХ С ОТКРЫТОУГОЛЬНОЙ ГЛАУКОМОЙ С УЧЕТОМ ПАРАМЕТРОВ СОСТОЯНИЯ МИКРОЦИРКУЛЯТОРНОГО РУСЛА ЦЕНТРАЛЬНОЙ ЗОНЫ СЕТЧАТКИ // Вопросы науки и образования. 2021. №10 (135). URL: <https://cyberleninka.ru/article/n/optimizatsiya-terapii-bolnyh-s-otkrytougolnoy-glaukomoy-s-uchetom-parametrov-sostoyaniya-mikrotsirkulyatornogo-rusla-tsentralnoy> (дата обращения: 13.02.2023).
19. Набибуллаева Р.З. ЦЕЛЕВЫЕ ОРИЕНТИРЫ В ОБЛАСТИ ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ УЗБЕКИСТАН ДО 2040 г. // Большая Евразия: развитие, безопасность, сотрудничество. 2020. №3-2. URL: <https://cyberleninka.ru/article/n/tselevye-orientiry-v-oblasti-zdravoohraneniya-respubliki-uzbekistan-do-2040-g> (дата обращения: 13.02.2023).
20. Хайдаров М. М., Мурадова Р. Р. ГЕПАТОТОКСИЧНОСТЬ ЛЕКАРСТВЕННЫХ СРЕДСТВ КАК ОДНА ИЗ ПРОБЛЕМ СОВРЕМЕННОЙ МЕДИЦИНЫ //Наука через призму времени. – 2020. – №. 11. – С. 46-49.
21. Мурадова Раиля Рустамовна, Хайдаров Мусо Мухаммадиевич ФОТОТОКСИЧЕСКИЕ И ФОТОАЛЛЕРГИЧЕСКИЕ РЕАКЦИИ ПРИ ИСПОЛЬЗОВАНИИ СОВРЕМЕННЫХ ЛЕКАРСТВЕННЫХ СРЕДСТВ И НЕКОТОРЫХ РАСТЕНИЙ // Вопросы науки и образования. 2020. №37 (121). URL: <https://cyberleninka.ru/article/n/fototoksicheskie-i-fotoallergicheskie-reaktsii-pri-ispolzovanii>-Хайдаров Мусомиддин Мухаммадиевич, Мурадова Раиля Рустамовна, Худойбердиева Гулрух Собиржоновна Оптимизация премедикации при хирургических вмешательствах в гинекологии // Достижения науки и образования. 2020. №5 (59). URL: <https://cyberleninka.ru/article/n/optimizatsiya-premedikatsii-pri-hirurgicheskikh-vmeshatelstvah-v-ginekologii> (дата обращения: 13.02.2023).современных-лекарственных-средств-и-некоторых-растений (дата обращения: 13.02.2023).
22. Нуралиева Р. и др. Современная терапия артериальной гипертонии, протекающей на фоне сахарного диабета //Журнал проблемы биологии и медицины. – 2015. – №. 4, 1 (85). – С. 162-164.
23. Мурадова Р. и др. Отравление нафтизином у детей //Журнал проблемы биологии и медицины. – 2015. – №. 4, 1 (85). – С. 160-161.
24. Холлиев Р. и др. Состояние процессов пол-аос и показателей иммунного статуса у больных бронхиальной астмой //Журнал проблемы биологии и медицины. – 2015. – №. 3 (84). – С. 69-71.
25. Нуралиева Р. и др. Особенности клинической фармакологии лекарственных средств при лактации //Журнал проблемы биологии и медицины. – 2015. – №. 3 (84). – С. 165-169.
26. Ахмеджанова Н. и др. Endogenous intoxication in children with chronic pyelonephritis //Журнал проблемы биологии и медицины. – 2015. – №. 3 (84). – С. 72-74.

27. Ашурова М. и др. Значение фармакологического аудита в рациональном использовании лекарственных средств //Журнал проблемы биологии и медицины. – 2015. – №. 3 (84). – С. 122-124.
28. Хаитова Н. и др. Ассоциация иммунологических и генетических механизмов в регуляции тонуса бронхов при бронхиальной астме //Журнал вестник врача. – 2013. – Т. 1. – №. 03. – С. 186-187.
29. Ибадова Д. и др. Принципы применения тиазидных и тиазидоподобных диуретиков при лечении гипертонической болезни (обзор литературы) //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 46-50.
30. Ибадова Д. и др. Фармакоэкономика и фармакоэпидемиология //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 41-46.
31. Ибадова Д. и др. Методы контроля эффективности и безопасности фармакотерапии //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 57-59.
32. Рофеев М. и др. Принципы выбора лекарственных средств //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 105-109.
33. Ибадова Д. и др. Взаимодействие лекарственных средств //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 37-40.
34. Рофеев М. и др. Артериальная гипертония //Журнал вестник врача. – 2013. – Т. 1. – №. 02. – С. 101-105.
35. Абдуллаева Н. и др. Своеобразие протеолизного взрыва при пневмонии у детей на фоне ожоговой болезни //Журнал проблемы биологии и медицины. – 2012. – №. 2 (69). – С. 3-5.
36. Мурадова Р. и др. Наш опыт лечения острых алкогольных отравлений //Журнал вестник врача. – 2012. – Т. 1. – №. 01. – С. 95-96.
37. Мурадова Р. и др. Проблемы фармакотерапии при нарушениях сна //Журнал вестник врача. – 2012. – Т. 1. – №. 01. – С. 92-94.
38. Абдуллаева М. и др. Клинико-лабораторная характеристика пневмонии у детей на фоне ожоговой болезни //Журнал вестник врача. – 2012. – Т. 1. – №. 03. – С. 20-21.
39. Крайдашенко О. В. и др. Клиническая фармакология. – 2017.
40. Бочарова Л. С. Medline. ru СОДЕРЖАНИЕ ЖУРНАЛА.
41. Азимов Ш.Т., Шакиров Б.М., Карабаев Ж.Ш. и др. Ранняя некрэктомия в комплексном лечении детей с глубокими ожогами // Сб. науч. тр. II Съезда комбустиологов России. М., 2008. С. 159-160.
42. Алексеев А. А., Лавров В. А. Актуальные вопросы организации и состояние медицинской помощи пострадавшим от ожогов в Российской Федерации // Материалы II съезда комбустиологов России. М., 2008. С. 3-4.
43. Алексеев А.А., Крутиков М.Г., Яковлев В.П. Ожоговая инфекция: этиология, патогенез, диагностика, профилактика и лечение. Москва. «Вузовская книга», 2010. 413 с.
44. Алексеев А.А., Классификация глубины поражения тканей при ожогах. // III съезд комбустиологов России, Москва 15-18 ноябрь 2010г. Институт хирургии имени А.В. Вишневского Министерство Здравоохранения РФ; редкол.: – Москва, 2010. 3-4 с.
45. Алексеев А.А., Крылов К.М. //Классификация глубины поражения тканей при ожогах. III съезд комбустиологов России, Москва 15-18 ноябрь 2010 г. Институт хирургии

- имени А.В. Вишневого Министерство Здравоохранения РФ; редкол.: А.А. Алексеев, – Москва, 2010. 3-4. с.
46. Алексеев А.А., Т.А. Ушакова Ожоговый шок: проблемы остаются. Сборник научных трудов: IV съезд комбустиологов России, Москва, 13-16 окт. 2013 г./ ФГБУ Институт хирургии имени А.В. Вишневого Министерство Здравоохранения РФ; редкол.: А.А. Алексеев, С.В. Попов. – Москва, 2013. 40 с.
47. Амниев В.А., Алейник Д.Я. Современные аспекты оперативного лечения детей с обширными глубокими ожогами //Межд. медицинский форум человек и травма. Россия-Нижний Новгород. 19-20 июня 2001. с. 70-72.
48. Farrukh S. TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID." science and Innovation" International Scientific Journal. ISSN: 2181-3337, 1 (3), 317–320. – 2022.
49. Shernazarov F. TYPES OF HEMORRHAGIC DISEASES //CHANGES IN NEWBOENS, THEIR EARLY DIAGNOSIS.–2022.
50. Shernazarov F. F. CONGENITAL HEART DISEASE-CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES //Eurasian Journal of Medical and Natural Sciences. – 2022. – Т. 2. – №. 3. – С. 84-89.
51. Shernazarov F. MICROCIRCULATION DISORDERS IN THE VASCULAR SYSTEM OF THE BULBAR CONJUNCTIVA IN THE INITIAL MANIFESTATIONS OF CEREBRAL BLOOD SUPPLY DEFICIENCY. – 2022.
52. F. Shernazarov THE PROBLEM OF INSOMNIA CAUSES OF SLEEP DISORDER, REMEDIES AT HOME // SAI. 2023. №D1. URL: <https://cyberleninka.ru/article/n/the-problem-of-insomnia-causes-of-sleep-disorder-remedies-at-home> (дата обращения: 11.02.2023).
53. F. Shernazarov HYMORITIS SYMPTOMS, TREATMENT, METHODS OF FOLK MEDICINE, PREVENTION // SAI. 2023. №D1. URL: <https://cyberleninka.ru/article/n/hymoritis-symptoms-treatment-methods-of-folk-medicine-prevention> (дата обращения: 11.02.2023).
54. I. Shernazarov, F. Shernazarov NATIONAL-CULTURAL FEATURES IN THE TRANSLATION PROCESS // SAI. 2023. №B1. URL: <https://cyberleninka.ru/article/n/national-cultural-features-in-the-translation-process> (дата обращения: 11.02.2023).
55. I. Shernazarov, F. Shernazarov PROBLEMS OF TRANSLATION OF FEATURES RELATED TO THE WAY OF LIFE OF PEOPLES // SAI. 2023. №B1. URL: <https://cyberleninka.ru/article/n/problems-of-translation-of-features-related-to-the-way-of-life-of-peoples> (дата обращения: 11.02.2023).
56. Shernazarov F. GENETIC MARKERS FOR THE DEVELOPMENT OF DIABETIC RETINOPATHY //Science and Innovation. – 2022. – Т. 1. – №. 8. – С. 919-923.
57. Shernazarov F. SIGNIFICANCE OF ENDOTHELIAL DYSFUNCTION IN THE DEVELOPMENT OF RETINOPATHY IN PATIENTS WITH AH AND WAYS OF ITS CORRECTION //Science and Innovation. – 2022. – Т. 1. – №. 8. – С. 101-113.
58. Shernazarov F. THE ROLE OF C-REACTIVE PROTEIN IN THE PATHOGENESIS OF VISUAL VASCULAR DISEASES IN PATIENTS WITH ARTERIAL HYPERTENSION //Science and Innovation. – 2022. – Т. 1. – №. 8. – С. 114-121.