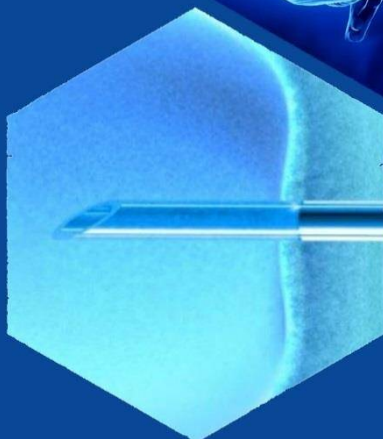
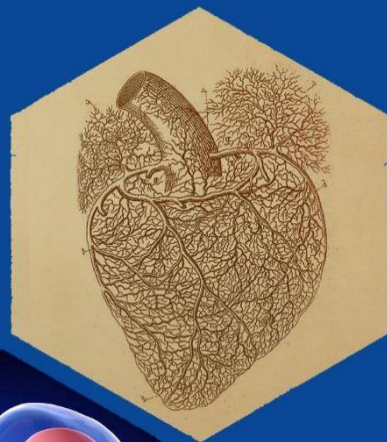


ISSN: 2181-0664
DOI: 10.26739/2181-0664
www.tadqiqot.uz

UZBEK MEDICAL JOURNAL

Volume 7, Issue



2025

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

7 ЖИЛД, 3 СОН

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ
ТОМ 7, НОМЕР 3

UZBEK MEDICAL JOURNAL
VOLUME 7, ISSUE 3



ТОШКЕНТ-2025

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ | UZBEK MEDICAL JOURNAL

№3 (2025)

Бош мухаррир:
Главный редактор:
Chief Editor:

Мадазимов Мадамин Муминович
Ректор Андижанского Государственного
медицинского института, д.м.н., профессор
кафедры факультетской и госпитальной
хирургии

Тахрият раиси:
Председатель редакционной коллегии:
Chairman of the editorial Board:

Алексеев Андрей Анатольевич
Директор ожогового центра НМИЦ хирургии
им. В.Вишневского, главный комбустиолог
Министерства здравоохранения России, д.м.н.,
профессор.

Бош мухаррир ўринбосари:
Заместитель главного редактора:
Deputy Chief Editor:

Салахитдинов Камалиддин Зухриддинович
доцент, д.м.н. кафедры факультетской и
госпитальной хирургии Андижанского
Государственного медицинского института

Маъсул котиб:
Ответственный секретарь:
Executive Secretary:

Досина Маргарита Олеговна
в.н.с. ГНУ "Институт физиологии Национальной академии наук Беларуси", к.б.н., председатель Совета
молодых ученых Отделения медицинских наук НАН Беларуси

ТАХРИРИЙ МАСЛАХАТ КЕНГАШИ | РЕДАКЦИОННЫЙ

Хужамбердиев Мамазоир Ахмедович
д.м.н., профессор кафедры госпитальной терапии
Андижанского Государственного медицинского института

Привалова Ирина Леонидовна
д.б.н., профессор кафедры нормальной физиологии
Курского государственного медицинского университета,
заведующая лабораторией физиологии висцеральных систем
НИИ физиологии (Курск)

Гаврилова Елена Анатольевна
д.м.н., профессор, заведующая кафедрой лечебной
физикультуры и спортивной медицины Северо-западного
государственного медицинского университета им. И.И.
Мечникова (Санкт-Петербург)

Чурганов Олег Анатольевич
д.п.н., профессор кафедры ЛФК и спортивной медицины
Северо-Западного государственного
медицинского университета им. И.И. Мечникова (Санкт-
Петербург)

Салахитдинов Зухриддин Салахитдинович
д.м.н., профессор, заведующий кафедрой ВОП №1,
Андижанского государственного медицинского института

Рябчиков Денис Анатольевич
д.м.н., в.н.с. онкологического отделения хирургических
методов лечения ФГБУ "НМИЦ
онкологии им. Н.Н. Блохина" Минздрава России

Гулямов Суръат Саидвалиевич
д.м.н., профессор кафедры оториноларингологии, детской
оториноларингологии, стоматологии
Ташкентского педиатрического медицинского института

Тереза Магалхайз
профессор, заведующая кафедрой Судебной медицины
государственного университета Порту (Португалия)

Юлдашев Илхом Рузиевич
д.м.н., профессор, заведующий кафедрой Аллергологии,
иммунологии, микробиологии
Ташкентского педиатрического медицинского института

Хамраев Абдурашид Журакулович
д.м.н., профессор кафедры госпитальной детской хирургии,
Ташкентского педиатрического медицинского института

РЕДАКЦИОННАЯ КОЛЛЕГИЯ:

Рузиев Шерзод Ибодуллаевич д.м.н., доцент кафедры судебной медицины и медицинского права Ташкентского педиатрического медицинского института

Якубова Олтиной Абдуганиевна доктор медицинских наук, доцент, заведующая кафедрой акушерства и гинекологии, неонатологии факультета повышения квалификации и переподготовки врачей Андижанского государственного медицинского института

Бабич Светлана Михайловна доцент, заведующая кафедрой социальной гигиены Андижанского государственного медицинского института

Цеомашко Наталья Евгеньевна д.б.н, с.н.с., заведующая отделом медико-генетических исследований МНИЛ Ташкентской медицинской академии

Хамраева Лола Салимовна доцент, к.м.н. кафедры офтальмологии, детской офтальмологии Ташкентского педиатрического медицинского института

Усманходжаева Адиба Амирсaidовна доцент, к.м.н., заведующая кафедрой Народной медицины, реабилитологии и физической культуры Ташкентской медицинской академии

Шарипова Фарида Камильевна к.м.н., доцент кафедры психиатрии, наркологии и детской психиатрии, медицинской психологии, психотерапии Ташкентского педиатрического медицинского института

Бузруков Батир Тулкунович д.м.н., профессор, заведующий кафедрой офтальмологии, детской офтальмологии Ташкентского педиатрического медицинского института

Туйчиев Галибжан Урмонжонович к.м.н., доцент, заведующий кафедрой детской хирургии, детской анестезиологии-реаниматологии с курсом офтальмологии и стоматологии факультета усовершенствования и переподготовки врачей АГМИ

Маматхужаева Гулнора Нажмитдиновна доцент, к.м.н. кафедры Офтальмологии Андижанского Государственного медицинского института

Каримова Зиёда Кушбаевна доцент, к.м.н. кафедры Аллергологии, клинической иммунологии, микробиологии Ташкентского педиатрического медицинского института

Усманова Шоира Равшанбековна Ташкент давлат стоматология институти госпитал терапевтик стоматология кафедраси доценти

Расулова Нодира Алишеровна доцент кафедры педиатрии и общей практики ФПДО Самаркандский государственный медицинский университет

Махмудова Лола Иззатилоевна Бухарский Государственный медицинский институт

Адилова Дилнавоз Ризокуловна Бухарский государственный медицинский институт

Тахирова Камолахон Аббасовна доцент кафедры Ташкентского государственного стоматологического института

Камилова Адиба Закиржановна Ташкентский государственный медицинский университет

Убайдуллаева Нигора Ильясовна Ташкентский государственный медицинский университет

Юлдашева Насиба Алишеровна Ташкентский государственный медицинский университет

Хатамова Матлюба Тилавовна профессор, Бухарский государственный медицинский институт

Махсумова Ирода Шавкатовна Ташкентский государственный медицинский университет

Абдуллаев Шерзод Рахматович Центр развития профессиональной квалификации медицинских работников

Кадырбаева Алия Ташкентский государственный медицинский университет,

Шаева Рано Гайратовна Доктор медицинских наук, доцент Бухарский государственный медицинский институт

Контакт редакций журналов. www.tadqiqot.uz

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

Editorial staff of the journals of www.tadqiqot.uz

Tadqiqot LLC the city of Tashkent,

Amir Temur Street pr.1, House 2.

Web: <http://www.tadqiqot.uz/>; Email: info@tadqiqot.uz

Phone: (+998-94) 404-0000

МУНДАРИЖА | СОДЕРЖАНИЕ | CONTENT

1. Bacteriorium in the post-natural period on the background of afthozny stomatitis 6
Khotamova Matluba Tilavovna
2. Clinical and ophthalmological features of the course of allergic conjunctivitis in
military personnel..... 11
Abdullaev Sh.R., Namozov A.K.
3. Features of anthropometric and clinical-anamnestic characteristics in patients after
meniscectomy.....23
Latipov Ulmasjon Shaykhiddinovich, Yusupov Shukhrat Abdurassulovich MD,
4. Chronic hyperplastic laryngitis.....35
Khushvakova Nilufar Zhurakulovna, Xamidova Farida Mo'minovna, Bo'riyeva Dilnoz
Baxriddinovna
5. Hiccups cancer diseases.....42
Khushvakova Nilufar Zhurakulovna, Xamidova Farida Mo'minovna, Bo'riyeva Dilnoz
Baxriddinovna
6. Markers of hepatic function, inflammation, and endothelial dysfunction in the
long-term period after liver donation in living-related transplantation.....49
Xaybullina Z.R., Ismailov S.I., Tairova L.S., Bondarchuk M.V., Abdushukurova S.E.,
Abdullayeva S.D., Payziyeva N.R., Usmanov A.A., Fayzullayev O.A., Tuksanov E.A.,
Shamsiyeva N.R.
7. Anthropometric and functional characteristics of adolescent athletes depending on
the specifics of sports discipline.....63
Abdumadzhidov M.A. Makhmudov D.E.

HICCUPS CANCER DISEASES

<https://doi.org/10.5281/zenodo.21605786>**Khushvakova Nilufar Zhurakulovna**

DSc Professor, head of department

Head of the Department of Otolaryngology Samarkand State Medical University

nilumedlor@mail.ru<https://orcid.org/0009-0000-6717-2067>

Xamidova Farida Mo'minovna

Samarkand State Medical University, Department of Pathological Anatomy, section biopsy course. Ph.D. (DCs) Associate Professor

<https://orcid.org/0000-0001-6084-7025>Xamidova.f@05mail.ru

Bo'riyeva Dilnoz Baxriddinovna

Termez University of Economics and Service Faculty of Medicine

Email - buriyevadilnoz29@gmail.comOrcid <https://orcid.org/0009-0000-9739-3397>**Abstract:** Hiccups are sudden, involuntary contractions of the diaphragm and intercostal muscles followed by rapid closure of the vocal cords, producing the characteristic “hic” sound.

While short episodes of hiccups are common and harmless, persistent or intractable hiccups in cancer patients can be exhausting, painful, and may indicate an underlying complication that requires medical attention.

Keywords: hiccups, persistent hiccups, chronic hiccups, intractable hiccups, recurrent hiccups, singultus (medical term for hiccups)

ИКАНЬЕ ПРИ ОНКОЛОГИЧЕСКИХ ЗАБОЛЕВАНИЯХ

Хушвакова Нилуфар Журакуловна

DSc, профессор, заведующая кафедрой

Заведующая кафедрой оториноларингологии Самаркандского государственного медицинского университета

nilumedlor@mail.ru<https://orcid.org/0009-0000-6717-2067>

Хамидова Фарид Муминовна

Самаркандский государственный медицинский университет, кафедра патологической анатомии, курс биопсии

PhD (DSc), доцент

<https://orcid.org/0000-0001-6084-7025>Xamidova.f@05mail.ru

Буриева Дилноза Бахриддиновна

Термезский университет экономики и сервиса, медицинский факультет

Email: buriyevadilnoz29@gmail.com

ORCID: <https://orcid.org/0009-0000-9739-3397>

Аннотация. Иканье представляет собой внезапные, непроизвольные сокращения диафрагмы и межрёберных мышц, сопровождающиеся быстрым смыканием голосовых связок, что вызывает характерный звук «ик». Кратковременные эпизоды икоты распространены и безвредны, однако у онкологических пациентов стойкая или труднокурабельная икота может быть изнуряющей, болезненной и нередко служит признаком скрытого осложнения, требующего медицинского вмешательства.

Ключевые слова: икота, стойкая икота, хроническая икота, труднокурабельная икота, рецидивирующая икота, *singultus* (медицинский термин для икоты).

SARATON KASALLIKLARIDA KUZATILADIGAN IKKINISH (HICCUPS)

Xushvakova Nilufar Zhurakulovna

DSc, professor, kafedra mudiri

Samarqand Davlat Tibbiyot Universiteti Otorinolarinologiya kafedrasini mudiri

nilumedlor@mail.ru

<https://orcid.org/0009-0000-6717-2067>

Xamidova Farida Mo‘minovna

Samarqand Davlat Tibbiyot Universiteti, Patologik anatomiya kafedrasini, biopsiya kursi

PhD (DSc), dotsent

<https://orcid.org/0000-0001-6084-7025>

Xamidova.f@05mail.ru

Bo‘riyeva Dilnoz Baxriddinovna

Termiz Iqtisodiyot va Servis Universiteti, Tibbiyot fakulteti

Email: buriyevadilnoz29@gmail.com

ORCID: <https://orcid.org/0009-0000-9739-3397>

Annotatsiya. Ikkinish — diafragma va qovurg‘alar orasidagi mushaklarning to‘satdan, ixtiyorsiz qisqarishi natijasida ovoz boylamlarining tez yopilishi sodir bo‘ladi va o‘ziga xos “hik” tovushi paydo bo‘ladi. Qisqa muddatli ikkinish odatda zararsiz bo‘lsa-da, saraton kasalligi bilan og‘rigan bemorlarda davomli yoki to‘xtovsiz ikkinish juda charchatib qo‘yishi, og‘riq keltirishi va ko‘pincha tibbiy e‘tibor talab qiladigan yashirin asorat belgisi bo‘lishi mumkin.

Kalit so‘zlar: ikkinish (hiccups), davomli ikkinish, surunkali ikkinish, davolashga qiyin ikkinish, qaytalanuvchi ikkinish, *singultus* (ikkinishning tibbiy atamasi).

Hiccups, medically known as *singultus*, are sudden, repetitive contractions of the diaphragm followed by the rapid closure of the vocal cords, producing the distinctive “hic” sound.

In most people, hiccups are harmless and short-lived. However, in oncology, persistent or intractable hiccups can become a severe clinical issue. They may

interfere with eating, sleeping, and communication, and can signal deeper neurological, metabolic, or anatomical problems associated with cancer or its treatment.

Although data vary, studies suggest that 15–30% of cancer patients experience hiccups at some point during their illness. In advanced or palliative care settings, around 10% may suffer from persistent or intractable hiccups lasting longer than 48 hours.

Persistent hiccups can worsen fatigue, decrease appetite, and lead to weight loss, malnutrition, or aspiration pneumonia. These complications significantly reduce a patient's quality of life and may disrupt cancer treatment schedules. Hiccups are common in people with cancer, sometimes caused by the disease itself (especially gastrointestinal cancers) or by treatments like chemotherapy and steroids. For many patients, hiccups are a temporary side effect, but persistent, long-lasting hiccups can occur in advanced cancer and may interfere with daily activities, requiring medical attention. Treatments for persistent hiccups can include changing medications, taking prescription drugs, or, in some cases, other medical procedures. Neurological damage plays a significant role in the development of persistent or intractable hiccups among cancer patients. Brain metastases, particularly those involving the medulla oblongata or other areas of the brainstem, can interfere with the central hiccup reflex arc, which regulates involuntary diaphragmatic contractions. Similarly, spinal cord compression or injury, often seen in metastatic spread to the vertebrae, can disrupt neural pathways that connect the diaphragm, phrenic nerve, and respiratory control centers. These disruptions alter the normal balance of excitatory and inhibitory signals in the central nervous system, leading to uncontrolled hiccup episodes. In advanced cancer cases, such neurological involvement is a critical indicator of systemic disease progression and may require combined management approaches, including corticosteroids, anticonvulsants, or surgical decompression, depending on the underlying lesion. Post-operative hiccups are relatively common in patients who have undergone thoracic or abdominal surgery, and are generally caused by mechanical or chemical irritation of the diaphragm and surrounding nerves.

During such procedures, manipulation of the phrenic nerve, vagus nerve, or peritoneal structures may trigger abnormal stimulation of the hiccup reflex arc. Accumulation of gas within the stomach or intestines, distension of abdominal organs, or post-operative inflammation can further exacerbate the condition. In most cases, these hiccups are transient and resolve spontaneously within a few hours or days as the effects of anesthesia, mechanical ventilation, and surgical trauma subside. However, in vulnerable patients—particularly those with cancer-related metabolic or neurological complications—post-surgical hiccups may persist longer, requiring medical interventions such as prokinetic agents, chlorpromazine, or metoclopramide to alleviate discomfort and prevent respiratory fatigue. Certain chemotherapeutic agents and adjunct medications are known to provoke hiccups, either directly or indirectly, by influencing the central nervous system or gastrointestinal pathways involved in diaphragmatic control. Agents such as cisplatin and carboplatin—commonly used in the treatment of solid tumors—can irritate the vagus or phrenic nerves, or alter

neurotransmitter balance in the brainstem, triggering the hiccup reflex. Moreover, corticosteroids like dexamethasone, frequently administered as part of antiemetic regimens during chemotherapy, have been strongly associated with the onset of persistent hiccups.

The mechanism is thought to involve stimulation of steroid-sensitive neurons in the medulla and changes in electrolyte homeostasis. While most drug-induced hiccups are short-lived, in some cancer patients they can become severe and recurrent, leading to sleep disturbance, dehydration, and reduced quality of life. Management typically includes adjusting the medication regimen, lowering steroid doses, or introducing pharmacological treatments such as gabapentin, baclofen, or chlorpromazine to control symptoms.

Tumor growth within the thoracic or abdominal cavity can directly contribute to the onset of persistent hiccups by exerting mechanical pressure on the diaphragm or adjacent neural structures. Large mediastinal masses, lung tumors, or hepatic metastases may compress the phrenic or vagus nerves, which play a central role in the hiccup reflex arc. This mechanical irritation stimulates involuntary diaphragmatic contractions and disrupts normal respiratory control. In addition, retroperitoneal and gastric tumors can increase intra-abdominal pressure, further aggravating diaphragmatic movement and triggering reflex hiccups. In patients with advanced malignancies, such pressure effects are often accompanied by pleural effusion, ascites, or organomegaly, which can amplify the neural stimulation. Persistent hiccups due to tumor compression not only cause discomfort but may also signal disease progression or metastatic spread, making them a valuable clinical clue during cancer evaluation. Symptomatic relief may involve nerve blockade, drainage of effusions, or targeted oncologic therapy to reduce the tumor burden.

Gastrointestinal and metabolic disturbances frequently contribute to the development of hiccups in cancer patients. Conditions such as gastric distension, reflux esophagitis, or intestinal obstruction can mechanically stimulate the vagus and phrenic nerves, leading to repetitive diaphragmatic spasms. Moreover, hepatic metastases or pancreatic tumors may disrupt normal digestive and metabolic processes, resulting in electrolyte imbalances—particularly changes in sodium, potassium, and calcium levels—that alter neural excitability. Uremia, renal failure, and liver dysfunction can also impair detoxification pathways, allowing neurotoxic metabolites to accumulate and irritate the central hiccup center in the medulla oblongata. These factors often coexist in advanced malignancy, creating a multifactorial environment that perpetuates persistent hiccups. Effective management requires addressing the underlying metabolic disorder, correcting electrolyte disturbances, and alleviating gastrointestinal distension through dietary adjustments, medication, or decompression techniques.

Cancer-Related Triggers

Direct tumor effects – compression or invasion near the diaphragm, esophagus, or mediastinum may irritate the phrenic or vagus nerve. Chemotherapy drugs – agents like cisplatin, carboplatin, irinotecan, and corticosteroids (especially dexamethasone) can stimulate the hiccup reflex. Metabolic abnormalities – electrolyte imbalances

such as hypercalcemia, hyponatremia, and uremia often appear in advanced cancer and contribute to hiccups. Neurological causes – brain metastases, spinal lesions, or cranial nerve damage can alter the hiccup reflex pathway. Post-surgical or gastrointestinal factors – bloating, gastric distension, or esophagitis after surgery or radiation therapy can also play a role. Hiccups, or singultus, are short, involuntary contractions of the diaphragm followed by a quick closure of the vocal cords, producing the familiar “hic” sound.

Modern oncology lacks large clinical trials on hiccups.

Future research should explore:

- Neurophysiological mechanisms of chemotherapy-induced hiccups
- Safer and more effective medication combinations
- Non-invasive therapies such as vagus nerve stimulation and acupuncture

Although common and usually harmless, hiccups may become a serious medical problem when they are persistent (lasting over 48 hours) or intractable (lasting more than one month). Metabolic imbalance is one of the most important internal triggers of persistent hiccups in oncology. When normal blood chemistry is disrupted, the excitability of the nervous system changes — especially within the phrenic and vagus nerves, which control the diaphragm and are central to the hiccup reflex.

In many cancer patients, elevated calcium levels (hypercalcemia) occur due to bone metastases or paraneoplastic syndromes. Excess calcium increases neuronal irritability, making the diaphragm more prone to involuntary contractions. Similarly, renal or hepatic failure leads to the accumulation of metabolic waste and toxins in the bloodstream, which can irritate the central nervous system. Electrolyte disturbances — including abnormalities in sodium (Na^+), potassium (K^+), and magnesium (Mg^{2+}) — further disrupt membrane potentials and nerve signaling. Together, these metabolic abnormalities create a biochemical environment that continuously stimulates the hiccup reflex arc, resulting in prolonged or intractable hiccups. Proper correction of electrolytes and treatment of the underlying disorder often leads to symptom relief. In patients with cancer, hiccups can indicate internal organ irritation, metabolic disorders, or neurological damage caused by the disease or its treatment.

Hiccups in cancer patients are more than a minor discomfort — they may reveal underlying medical complications and strongly affect life quality. Persistent hiccups require a full medical assessment, targeted therapy, and emotional support. Early recognition and multidisciplinary care help prevent further complications and improve patient well-being. Hiccups are a simple physiological reflex in healthy individuals but may become a serious medical symptom in cancer patients. When persistent or intractable, they can indicate tumor compression, metabolic imbalance, neurological injury, or side effects of chemotherapy and corticosteroids. In oncology, hiccups are not merely a discomfort — they represent a multifactorial complication that affects nutrition, sleep, emotional stability, and overall quality of life. Recognizing their clinical significance helps healthcare professionals detect deeper physiological disturbances at an early stage. Effective management requires a comprehensive and

multidisciplinary approach, including identification of reversible causes, correction of metabolic disorders, pharmacological therapy (such as baclofen, chlorpromazine, or gabapentin), and supportive palliative care. Further research should focus on understanding the exact neurophysiological mechanisms of cancer-related hiccups and developing targeted treatment protocols. Integrating symptom tracking into hospital information systems can also improve the quality of monitoring and patient comfort. In conclusion, addressing hiccups in cancer is not only about relieving a minor symptom — it is an essential part of holistic patient care, improving both physical and psychological well-being in those living with cancer.

Literature:

1. Alshammary S.A., et al. *Successful Treatment of Persistent Hiccups in an Advanced Myeloblastic Leukemia Patient with Gabapentin*. PMC. 2023.
2. Gilbar P., McPherson I. *Severe hiccups during chemotherapy: corticosteroids the likely culprit*. Journal of Oncology Pharmacy Practice. 2009;15(4):233-6.
3. Hosoya R., Tanaka I., Ishii-Nozawa R., Amino T., Kamata T., Hino S., Kagaya H., Uesawa Y. *Risk Factors for Cancer Chemotherapy-Induced Hiccups (CIH)*. Pharmacology & Pharmacy. 2018;9:331-343. DOI:10.4236/pp.2018.98026.
4. Coradazzi A.L., Inhaia C.L.S., Caponero R. *Hiccups in palliative patients: a mini review*. Hosp & Palliative Med Int J. 2018;2(2):90–92. DOI:10.15406/hpmij.2018.02.00062.
5. Woelk C.J., et al. *Managing hiccups*. PMC-PubMed Central. 2011. Overview of causes including metabolic disorders
6. Medscape (via eMedicine). *Hiccups: Practice Essentials, Background, Pathophysiology*. Updated 2023. Contains list of metabolic causes (hyponatremia, hypocalcemia etc.).
7. Healthcare Providers' Experiences with Hiccups in Patients (Wieland J et al., 2023)
8. A Systematic Literature Review of Interventions to Manage Hiccups in Patients With Cancer Undergoing Active Treatment (2025)
9. Successful Treatment of Persistent Hiccups in an Advanced Palliative Cancer Patient With Gabapentin: A Case Report (Alshammary S et al., 2023)
10. Study on Risk Factors for Hiccups Induced by Cisplatin-based Chemotherapy (Japanese Journal of Hospital Pharmacy & Health Care Sciences, 2009)

ЎЗБЕК ТИББИЁТ ЖУРНАЛИ

7 ЖИЛД, 3 СОН

УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ
ТОМ 7, НОМЕР 3

UZBEK MEDICAL JOURNAL
VOLUME 7, ISSUE 3

Editorial staff of the journals of www.tadqiqot.uz
Tadqiqot LLC the city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: <http://www.tadqiqot.uz/>; Email: info@tadqiqot.uz
Phone: (+998-94) 404-0000

Контакт редакций журналов. www.tadqiqot.uz
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