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**COMPARATIVE ANALYSIS OF HEART DISEASE RISK FACTORS AND
MANAGEMENT STRATEGIES IN INDIA AND KYRGYZSTAN: A CROSS-COUNTRY
STUDY**

Индия менен Кыргызстандагы жүрөк ооруларынын тобокелдик факторлорунун жана башкаруу стратегияларынын салыштырма анализи: Өлкөлөр аралык изилдөө
Сравнительный анализ факторов риска сердечно-сосудистых заболеваний и стратегий управления в Индии и Кыргызстане: межстрановое исследование

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COMPARATIVE ANALYSIS OF HEART DISEASE RISK FACTORS AND MANAGEMENT STRATEGIES IN INDIA AND KYRGYZSTAN: A CROSS-COUNTRY STUDY

Abstract

Cardiovascular disease represents the number one cause of deaths in most industrialized countries. How and when a person's cardiovascular system breaks down depends upon an increasing number of known risk factors. These include family history and genetic predisposition to various CV system malfunctions, poor diet and/or obesity, inactivity, environmental pollutants, and the acute or chronic effects of various infective agents.

Keywords: Heart disease, Risk Factors of heart diseases, heart attack, diet and nutrition, cardiovascular complications.

Индия менен Кыргызстандагы жүрөк ооруларынын тобокелдик факторлорунун жана башкаруу стратегияларынын салыштырма анализи: Өлкөлөр аралык изилдөө

Аннотация

Жүрөк-кан тамыр оорулары көпчүлүк өнөр жайлуу өлкөлөрдө өлүмдүн биринчи себеби болуп саналат. Адамдын жүрөк-кан тамыр системасы кантип жана качан бузулушу белгилүү болгон тобокелдик факторлорунун санынын көбөйүшүнөн көз каранды. Аларга үй-бүлөлүк тарых жана ар кандай резюме системасынын бузулушуна генетикалык ыктуулук, туура эмес тамактануу жана/же семирүү, кыймылсыздык, айлана-чөйрөнү булгоочу заттар жана ар кандай инфекциялык агенттердин курч же өнөкөт таасирлери кирет.

Сравнительный анализ факторов риска сердечно-сосудистых заболеваний и стратегий управления в Индии и Кыргызстане: межстрановое исследование

Аннотация

Сердечно-сосудистые заболевания представляют собой причину номер один смертности в большинстве промышленно развитых стран. Как и когда сердечно-сосудистая система человека выходит из строя, зависит от растущего числа известных факторов риска. К ним относятся семейный анамнез и генетическая предрасположенность к различным нарушениям сердечно-сосудистой системы, неправильное питание и/или ожирение, малоподвижный образ жизни, загрязнители окружающей среды, острое или хроническое воздействие различных инфекционных агентов.

Ачык сөздөр: Жүрөк оорулары, Жүрөк ооруларынын тобокелдик факторлору, инфаркт, диета жана тамактануу, жүрөк-кан тамыр оорулары.

Ключевые слова: болезни сердца, факторы риска сердечных заболеваний, сердечный приступ, диета и питание, сердечно-сосудистые осложнения.

Introduction

This cross-country study aims to conduct a comparative analysis of heart disease risk factors and management strategies in India and Kyrgyzstan. Cardiovascular diseases are a leading cause of mortality in both countries, but the prevalence and risk factors may differ due to varying lifestyles, socioeconomic status, and healthcare infrastructure. The study utilizes a mixed-methods approach, including a systematic literature review, quantitative analysis of health surveys and clinical data, and qualitative interviews with healthcare professionals and patients. The findings will shed light on the similarities and differences in heart disease risk factors, prevention strategies, and management practices in India and Kyrgyzstan. The study also aims to identify effective interventions that can be implemented in both countries to reduce the burden of cardiovascular diseases. The results of this study can inform policymakers, healthcare professionals, and researchers in India, Kyrgyzstan, and other low- and middle-income countries facing similar challenges in the prevention and management of heart diseases.

Cardiovascular disease in Kyrgyzstan

Cardiovascular disease (CVD) is a significant public health issue in Kyrgyzstan, with a high prevalence and mortality rate. According to the World Health Organization (WHO), CVD accounts for over 60% of all deaths in the country. The age-standardized CVD mortality rate in Kyrgyzstan is 1,004 per 100,000 population, which is one of the highest rates in the world.

The prevalence of risk factors for CVD is also high in Kyrgyzstan. According to a national health survey conducted in 2016, 34% of the adult population smokes, 64% have hypertension, and 29% have high cholesterol levels. In addition, a large proportion of the population has an unhealthy diet and physical inactivity, which further increases the risk of developing CVD.

The burden of CVD is particularly high among men and older adults in Kyrgyzstan. The prevalence of CVD is higher among men than women, and the risk of CVD increases with age. The healthcare infrastructure in Kyrgyzstan faces significant challenges in addressing the burden of CVD, including inadequate resources, limited access to healthcare services, and a shortage of trained healthcare professionals.

Efforts to reduce the burden of CVD in Kyrgyzstan should focus on prevention and management strategies, including tobacco control, promotion of healthy lifestyles, early detection and treatment of hypertension and high cholesterol, and access to affordable and quality healthcare services. The use of telemedicine and digital health technologies may also be an effective approach to improving the prevention and management of CVD in Kyrgyzstan.

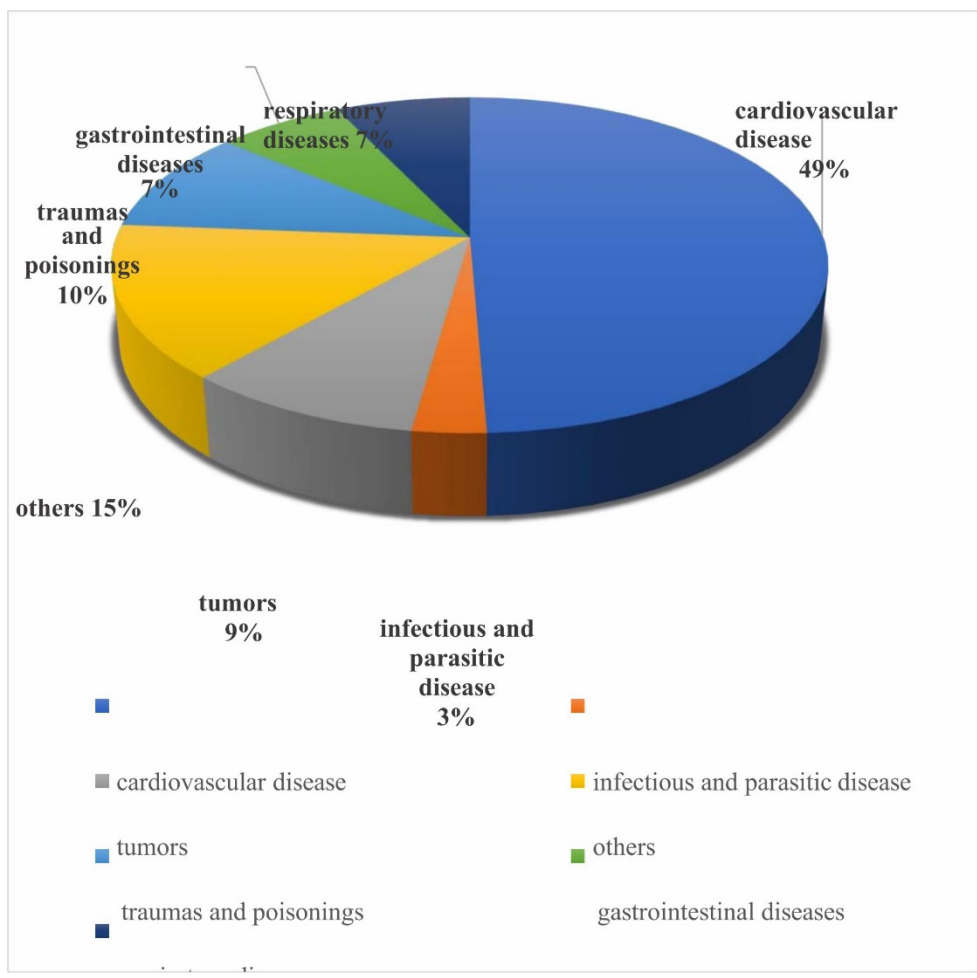


Chart 1. Causes of Death in Kyrgyz Republic

Cardiovascular disease Prevalence in India

Cardiovascular disease (CVD) is a significant public health problem in India, with a high burden of morbidity and mortality. According to the World Health Organization (WHO), CVD is the leading cause of death in India, accounting for 28% of all deaths in the country. The age-standardized CVD mortality rate in India is 272 per 100,000 population, which is higher than the global average of 235 per 100,000 population.

The prevalence of risk factors for CVD is also high in India. According to the India State-Level Disease Burden Initiative report published in 2017, high blood pressure, tobacco use, and unhealthy diets were the leading risk factors for CVD in the country. The report also indicated that the prevalence of hypertension in India increased from 20% in 1990 to 25% in 2016, while the prevalence of smoking and tobacco use remained high, with 11% of the adult population using smokeless tobacco and 6% smoking cigarettes.

The burden of CVD is not evenly distributed across different regions of India, with some states and populations more affected than others. According to a study published in the Lancet Global Health journal in 2018, the age-standardized prevalence of CVD in India varied from 6.9% in Bihar to 14.2% in Kerala. The study also found that the prevalence of CVD was higher among men than women and increased with age.

Efforts to reduce the burden of CVD in India should focus on prevention and

management strategies, including tobacco control, promotion of healthy diets and physical activity, early detection and treatment of hypertension and diabetes, and access to affordable and quality healthcare services. The use of technology, such as telemedicine and digital health interventions, may also be an effective approach to improving the prevention and management of CVD in India.

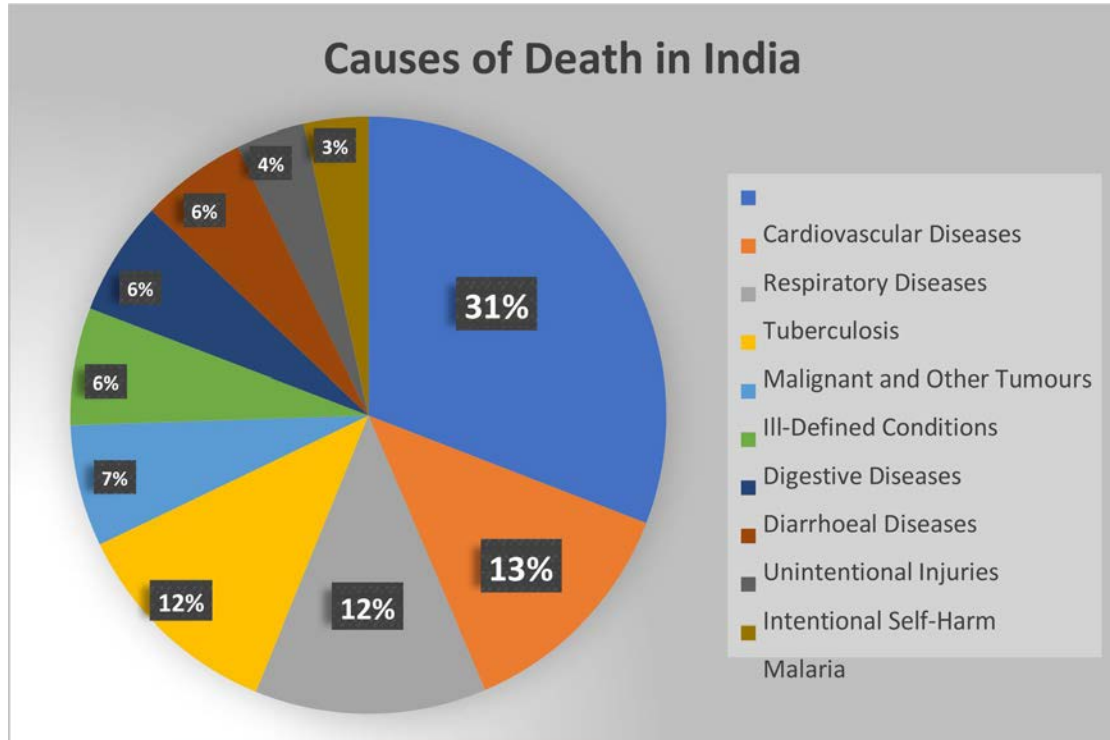


Chart 2. Causes of Death in India

Risk Factors for CVD in India:

In India, several risk factors contribute to the development of CVD, including high blood pressure, diabetes, smoking, physical inactivity, and unhealthy diets. The prevalence of these risk factors is high in the Indian population, particularly among those living in urban areas.

High blood pressure, also known as hypertension, is one of the leading risk factors for CVD in India. According to a study published in the *Journal of Hypertension* in 2019, the prevalence of hypertension in India increased from 20% in 1990 to 25% in 2016. The study also found that the prevalence of hypertension was higher among men than women and increased with age.

Diabetes is another significant risk factor for CVD in India. According to the International Diabetes Federation, India had the second-highest number of adults with diabetes in 2019, with an estimated 77 million people living with the condition. People with diabetes are at a higher risk of developing CVD, particularly if their blood glucose levels are not well controlled.

Smoking and physical inactivity are also major risk factors for CVD in India. According to the Global Adult Tobacco Survey conducted in 2017, 28.6% of adults in

India use tobacco in some form. In addition, many Indians lead sedentary lifestyles, which increases the risk of developing CVD.

Unhealthy diets, particularly those high in salt, sugar, and saturated fats, are also a significant risk factor for CVD in India. The Indian diet is often high in these components, contributing to the high prevalence of CVD in the country.

Risk Factors for CVD in Kyrgyzstan:

In Kyrgyzstan, several risk factors contribute to the development of CVD, including high blood pressure, smoking, physical inactivity, and unhealthy diets. The prevalence of these risk factors is high in the Kyrgyz population, particularly among those living in rural areas.

High blood pressure is a significant risk factor for CVD in Kyrgyzstan. According to the 2016 national health survey conducted in Kyrgyzstan, the prevalence of hypertension was highest in the Batken region (79%), followed by the Jalal-Abad region (76%). The survey also found that the prevalence of hypertension was higher among women than men.

Smoking is also a major risk factor for CVD in Kyrgyzstan. According to the Global Adult Tobacco Survey conducted in 2016, 36.6% of adults in Kyrgyzstan use tobacco in some form, with smoking prevalence higher among men than women.

Physical inactivity and unhealthy diets are also significant risk factors for CVD in Kyrgyzstan. Many Kyrgyz people lead sedentary lifestyles, and their diets are often high in salt, sugar, and saturated fats.

Conclusion

The burden of CVD is high in both India and Kyrgyzstan, with several risk factors contributing to its development. Efforts to reduce the burden of CVD in both countries should focus on prevention and management strategies, including tobacco control, promotion of healthy diets and physical activity, early detection and treatment of hypertension and diabetes, and access to affordable and quality healthcare services. Collaboration between health systems and policymakers in both countries can help to implement effective strategies to address these risk factors and reduce the burden of CVD.

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STUDY OF SIDE EFFECTS AFTER VACCINATION AGAINST COVID-19 IN THIRD-YEAR STUDENTS OF THE INTERNATIONAL MEDICAL FACULTY OF OSH STATE UNIVERSITY

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STUDY OF SIDE EFFECTS AFTER VACCINATION AGAINST COVID-19 IN THIRD-YEAR STUDENTS OF THE INTERNATIONAL MEDICAL FACULTY OF OSH STATE UNIVERSITY

Abstract

Throughout its existence, humanity has been in eternal confrontation with the world of microorganisms. The COVID-19 epidemic ("coronavirus disease 2019") has already gone down in history as an international emergency. Coronavirus infection (COVID-19) causes severe acute illness. The virus was first identified during an epidemic outbreak in Wuhan city, in the Hubei province of China. WHO announced this on December 31, 2019, and on January 30, 2020 declared the COVID-19 outbreak a global health emergency. On March 11, 2020, WHO declared COVID-19 a global pandemic. The purpose of this scientific work was to investigate third-year students of the Faculty of Medicine for complications after receiving the COVID-19 vaccine. Recommendations for maintaining a healthy lifestyle are presented.

Keywords: vaccine, coronavirus infection, pandemic, healthy lifestyle, complications.

ОшМУнун эл аралык медицина факультетинин 3-курсунун студенттеринде covid-19га каршы эмдөөдөн кийинки кыйынчылыктарды аныктоо

Изучение побочных действий вакцинации от covid-19 у студентов 3 курса международного медицинского факультета ОшГУ

Аннотация

Бүткүл өмүр бою адамзат микроорганизмдер дүйнөсү менен түбөлүк тирешүүдө. COVID-19 эпидемиясы («коронавирус оорусу 2019») буга чейин эл аралык өзгөчө кырдаал катары тарыхка кирген. Коронавирустук инфекция (COVID-19) катуу курч ооруну жаратат. Вирус биринчи жолу Кытайдын Хубэй провинциясындагы Ухань шаарында эпидемия учурунда аныкталган. Бул тууралуу ДСУ 2019-жылдын 31-декабрында жарыялап, 2020-жылдын 30-январында COVID-19 эпидемиясын глобалдык саламаттыкты сактоо өзгөчө кырдаал деп жарыялаган. 2020-жылдын 11-мартында ДСУ COVID-19ну глобалдык пандемия деп жарыялаган. Бул илимий иштин максаты эл аралык медицина факультетинин COVID-19 вакцинасын алгандан кийинки кыйынчылыктарды изилдөө.

Аннотация

На протяжении всего своего существования человечество находится в вечном противостоянии с миром микроорганизмов. Эпидемия COVID-19 («coronavirus disease 2019») уже вошла в историю как чрезвычайная ситуация международного уровня. Коронавирусная инфекция (COVID-19) вызывает тяжелое острое заболевание. Вирус был впервые выявлен во время эпидемической вспышки в городе Ухань, в провинции Хубэй в Китае. ВОЗ сообщил об этом 31 декабря 2019 году, а 30 января 2020 года объявила вспышку COVID-19 глобальной чрезвычайной ситуацией в области здравоохранения. 11 марта 2020 года ВОЗ объявила COVID-19 глобальной пандемией. Целью данной научной работы явилось исследовать студентов третьего курса международного медицинского факультета на наличие осложнений после получения вакцины от COVID-19. Представлены рекомендации для поддержания здорового образа жизни.

Ачык сөздөр: вакцина, коронавирус инфекциясы, пандемия, сергек жашоо образы, татаалдыктар, онлайн тестирилөө.

Ключевые слова: вакцина, коронавирусная инфекция, пандемия, здоровый образ жизни, осложнения.

Relevance

Corona virus is known as severe acute respiratory syndrome coronavirus 2 (sars-cov-2). In march 2020, the world health organization (WHO) declared the COVID-19 outbreak a pandemic [1].

The severity of COVID-19 symptoms can range from very mild to severe. Some people may have only a few symptoms. Some people may have no symptoms at all, but can still spread it (asymptomatic transmission). Some people may experience worsened symptoms, such as worsened shortness of breath and pneumonia, about a week after symptoms start [2].

Complications of the covid 19

1. Pneumonia and trouble breathing
2. Organ failure in several organs
3. Heart problems
4. A severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome)
5. Blood clots
6. Acute kidney injury
7. Liver injury and diseases
8. Additional viral and bacterial infections

Critical to achieving herd immunity: people in a population are immune to the virus to prevent its spread, is critical in bringing an end to the pandemic.

Support public health efforts: by getting vaccinated against COVID-19, individuals can help to support broader public health efforts to control the pandemic and protect vulnerable populations. This includes healthcare workers, first responders, and others who may be at higher risk of exposure to the virus [3].

Side effects from vaccine

COVID-19 vaccines can cause mild side effects after the first or second dose, including: Pain, redness or swelling where the shot was given fever, fatigue, headache, muscle pain, chills, joint, pain nausea and vomiting, swollen lymph nodes.

Changes revealed in hepatobiliary system:

1. Vaccine induced thrombotic thrombocytopenia
2. Hepatomegaly.
3. Hepatotoxicity.
4. Cholelithiasis
5. Drug induced liver injury [3,4].

Target

Study of side effects after vaccination against covid-19 in third-year students of the medical faculty of Osh State University.

Tasks

1. Investigate side effects from covid-19 vaccination based on survey conducted on 3rd year students of IMF.

2. The relevance of our work was the study of side effects from vaccination with Covid 19.

Materials and research methods

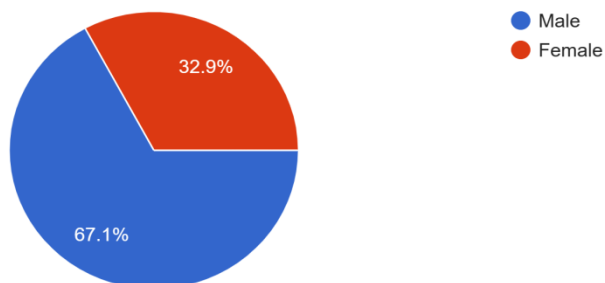
The survey included 152 students of the IMF, that included 32.9% girls and 67.1% males mostly in the age group of 20-22.

1. Investigate side effects from covid-19 vaccination based on survey conducted on 3rd year students of IMF.

2. The relevance of our work was the study of side effects from vaccination with Covid 19.

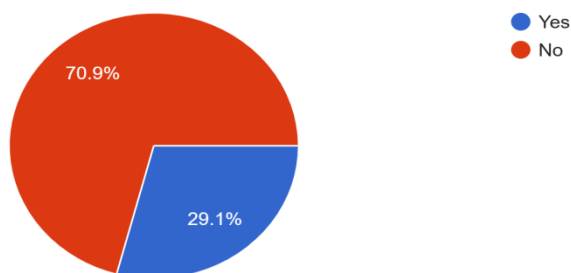
Result of survey

Gender?
152 responses



The chart shows that in the number of females studied, 67 percent of the men accounted for 33 percent.

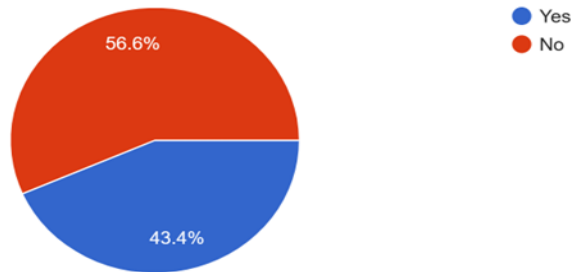
Did you get chills?
151 responses



When asked if patients had chills, 71% answered yes, 29% answered negatively.

Did you get fever?

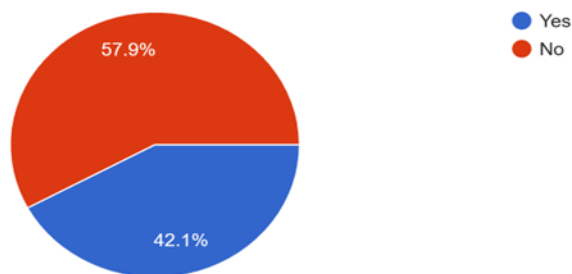
152 responses



57% had an increase in temperature; 43% had no temperature.

Did you have muscle pain?

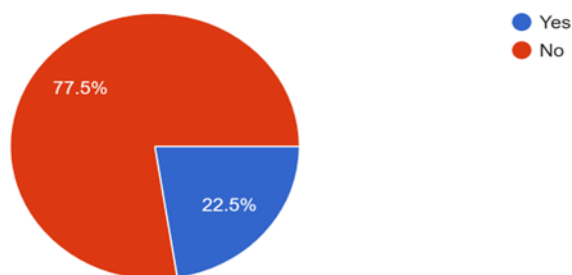
152 responses



Thus, in a study of muscle pain in third-year students of the Faculty of Medicine, about 58% noted that there was no pain, 42 percent had muscle pain.

Did you suffer from headache?

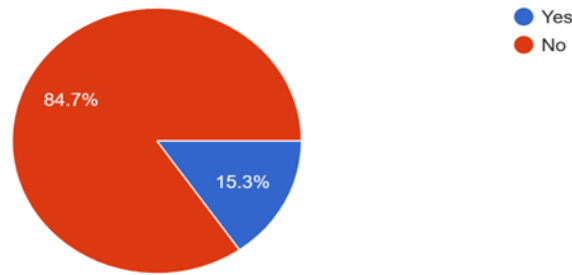
151 responses



When asked if you had a headache, 77% answered negatively, only 22% had a headache.

Was there pain, redness or swelling where you got the shot?

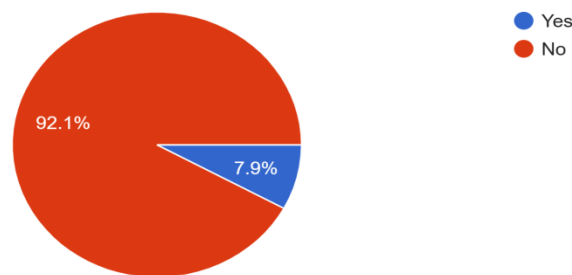
150 responses



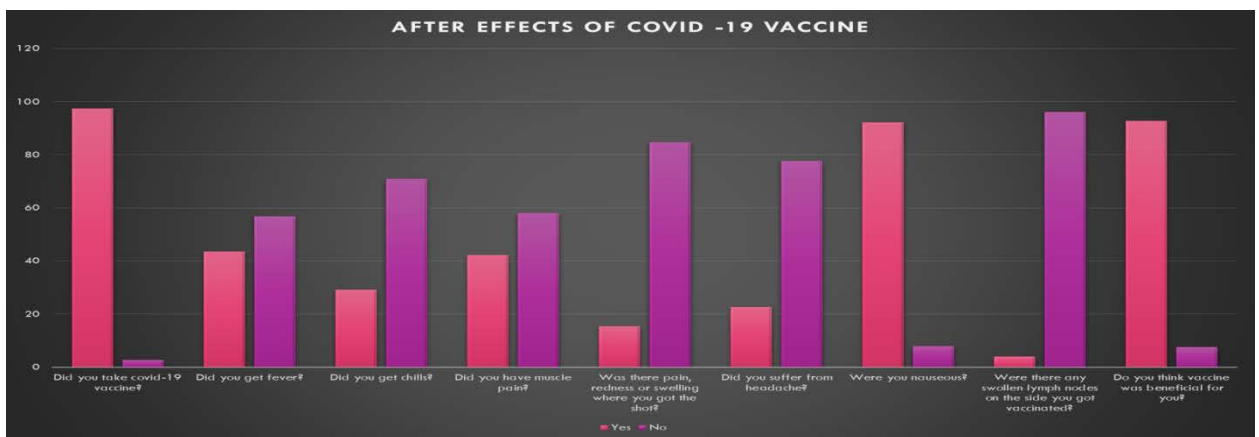
You study students for a local reaction to the introduction of the vaccine, 85 percent answered that there was no reaction, only 15% had soreness, redness at the injection site.

Were you nauseous?

151 responses



Only eight percent of the students had nausea after the injection, while 92 percent had no nausea.



Response	Did you take covid-19 vaccine?	Did you get fever?	Did you get chills?	Did you have muscle pain?	Was there pain, redness or swelling where you got the shot?	Did you suffer from headache?	Were you nauseous?	Were there any swollen lymph nodes on the side you got vaccinated?	Do you think vaccine was beneficial for you?
Yes	97.4%	43.4%	29.1%	42.1%	15.3%	22.5%	92.1%	3.9%	92.6%
No	2.6%	56.6%	70.9%	57.9%	84.7%	77.5%	7.9%	96.1%	7.4%

Conclusion of Survey

First Side Effects

Like any vaccine, COVID-19 vaccines can cause side effects, most of which are mild or moderate and go away within a few days on their own. Typical side effects include pain at the injection site, fever, fatigue, headache, muscle pain, chills, and swelling of lymph nodes. These symptoms were seen after a few hours or days without complications.

Get started

Rational nutrition is the basic principle of rational nutrition - moderation and diversity, because the body must receive all the necessary nutrients and trace elements. Healthy and balanced nutrition is the basis for the prevention of rectal cancer, constipation, hemorrhoids, gastritis, atherosclerosis, hypertension, osteoporosis and many other diseases.

Recommendations

for preventing infections:

A healthy lifestyle begins with a person's awareness of the fact that he lives wrong. And everyone does it differently: someone notices too much a figure on the scales, someone feels dissatisfied, broken, tired, someone is constantly sick. Healthy lifestyle is a set of measures for self-improvement, you should start small and strive for more.

Anti-epidemic measures:

- Wear a mask (respirator);
- Carry antiseptics with you;
- Avoid infection by avoiding sick citizens by 1.5-2 meters;
- Dress according to the season;
- Watch your personal hygiene.

References

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3. <https://www.ncbi.nlm.nih.gov/books/NBK570468/>
4. <https://www.who.int/news-room/feature-stories/detail/side-effects-of-covid-19-vaccines>

ОШ МАМЛЕКЕТТИК УНИВЕРСИТЕТИНИН ЖАРЧЫСЫ. МЕДИЦИНА

ВЕСТНИК ОШСКОГО ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА. МЕДИЦИНА

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**ОСОБЕННОСТИ ФИЗИЧЕСКОГО РАЗВИТИЯ СТУДЕНТОВ МЕДИЦИНСКИХ
ВУЗОВ ЮГА КЫРГЫЗСТАНА**

Түштүк Кыргызстандын медициналык жогорку окуу жайларынын студенттеринин
физикалык өнүгүшүнүн өзгөчөлүктөрү

Development of medical students in southern Kyrgyzstan

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Аннотация

В результате проведенных исследований физического здоровья студентов медицинского вуза установлено, что усредненные показатели физического развития (рост, масса тела, окружность грудной клетки в покое, на вдохе и на выдохе) имели достоверные половые различия ($p < 0,05$). Показана высокая информативность физических параметров как критериев прогноза ранних изменений в организме, а также установления гендерных различий в алиментарном статусе студентов.

Ключевые слова: физическое развитие студентов, здоровье студентов, паспорт здоровья студентов, функциональные показатели развития студентов.

Түштүк Кыргызстандын медициналык жогорку окуу жайларынын студенттеринин физикалык өнүгүшүнүн өзгөчөлүктөрү

Аннотация

Медициналык окуу жайдын студенттеринин дене бой ден соолугуна жүргүзүлгөн изилдөөлөрдүн натыйжасында физикалык өнүгүүнүн орточо көрсөткүчтөрү (бою, дене салмагы, эс алууда, дем алууда жана дем чыгарууда көкүрөк клеткасынын айланасы) анык жыныстык айырмачылыктарга ($p < 0,05$) ээ экендиги аныкталган. Денедеги эрте өзгөрүүлөрдү болжолдоо критерийлери катары физикалык параметрлердин жогорку маалыматтуулугу, ошондой эле студенттердин алиментартик статусундагы гендердик айырмачылыктарды белгилөө корсотулган.

Ачык сөздөр: студенттердин физикалык өнүгүүсү, студенттердин ден-соолугу, студенттердин ден-соолугу паспорту, студенттердин өнүгүүсүнүн функционалдык көрсөткүчтөрү.

Development of medical students in southern Kyrgyzstan

Abstract

As a result of the study of physical health of medical students it was found that the average indicators of physical development (height, body weight, chest circumference at rest, inhalation and exhalation) had significant gender differences ($p < 0.05$). The high informative value of physical parameters as criteria for predicting early changes in the body, as well as the establishment of gender differences in the nutritional status of students was shown.

Keywords: physical development of students, student health, student health passport, functional indicators of student development.

Актуальность проблемы. На современном мире процесс обучения в медицинском ВУЗе, характеризуется разнообразием форм и методов обучения, высокой интенсивностью труда, внедрением новых технических средств, большим объемом аудиторной и внеаудиторной нагрузки.

Информационные нагрузки и эмоциональные стрессы, сопровождающие обучение, предъявляют определенные требования к состоянию здоровья студентов. Смена режима труда и отдыха, сна и питания, неумение самостоятельно распределять свое время, отсутствие постоянного и систематического контроля взрослых вызывает у студентов психоэмоциональный дискомфорт. В результате формируются неправильные модели пищевого, соматического и психического поведения, что в будущем является основой возникновения и прогрессирования различных патологических состояний [1,6].

Здоровье студентов, в значительной степени определяется его питанием, которое должно быть рациональным и адекватным. Поддержание физического и психического здоровья молодежи в условиях настоящей медико-демографической ситуации является важнейшей задачей для сохранения производительной силы общества и национальной безопасности страны. В последнее время многими исследователями отмечают рост заболеваемости среди студентов в значительной мере обусловлен тем, что данная группа не обеспечена качественным и сбалансированным питанием [5,7].

Воздействию пищевого фактора на здоровье студентов посвящено достаточно большое количество научных работ, в которых исследованы нарастающая умственная нагрузка, гиподинамия [2,3,8]. Отмечено, что питание студентов-медиков нерационально (недостаточно, несбалансированно, нарушен режим), неадекватно и у части студентов имеются хронические заболевания желудочно-кишечного тракта [4,10]. В результате сравнительного анализа энерготрат и питания студентов медицинских ВУЗов, установлено, что рацион не обеспечивает адекватной энерготратам потребности в энергии, не оптимален по содержанию жиров, углеводов, минеральных веществ [9]. Неадекватность питания студентов медицинского ВУЗа связана со специфичностью системы их обучения. Студенты длительное время ежедневно вынуждены проводить в стенах учебного заведения - на лекциях, практических занятиях, в библиотеке и компьютерных классах, а также на самоподготовке в анатомических кабинетах, на вечерних и ночных дежурствах в клиниках, что отрицательно сказывается на режиме питания [6,10].

Вместе с тем, несмотря на пристальное внимание к проблеме питания студентов-медиков, влияние фактора питания на организм с учетом регионального компонента, влияющего на количественный и качественный баланс макро и микронутриентов, остается недостаточно изученным.

Цель исследования: провести исследований физического здоровья студентов медицинского вуза в зависимости пищевого статуса.

Материалы и методы. Для решения поставленных задач использован комплекс современных эпидемиологических, физиологических и статистических методов. Для выполнения поставленной цели была сформирована группа студентов в возрасте 18–21 года, состоящая из юношей (n = 88) и девушек (n = 128).

На первом этапе проведена оценка фактического питания с определением пищевой, энергетической ценности и сбалансированности рационов на основании анкетно-опросного метода, меню-раскладок, метода 24-часового (суточного) воспроизведения питания и анализа частоты потребления пищи [5].

Физическое развитие студентов оценивалось по соматометрическим (рост, масса тела, окружность грудной клетки и др.) и физиометрическим показателям (АД, ЧСС, мышечная сила кисти, становая сила, жизненная емкость легких) по общепринятым стандартам ВОЗ и единым методикам, принятым в антропометрии, при помощи центильного метода с использованием региональных центильных таблиц.

Результаты исследования. Под физическим развитием понимают совокупность внешних морфологических признаков (длины, массы тела и др.), характеризующих процессы роста организма, адекватность питания, физических нагрузок и т.п.

Средние величины показателей физического развития используются как одни из критериев здоровья популяции. Физическое развитие и его показатели - особенно масса тела, реагируют на недостаток или избыток нутриентов. Значительное изменение массы тела и ее составляющих сказывается на работоспособности и общей заболеваемости.

В результате проведенных исследований установлено, что усредненные показатели физического развития (рост, масса тела, окружность грудной клетки в покое, на вдохе и на выдохе) имели достоверные половые различия ($p < 0,05$) (табл.1). Рост у юношей составил $176,76 \pm 0,63$ см, у девушек $163,12 \pm 0,33$ см. Усредненные показатели массы тела юношей находились в пределах $69,56 \pm 1,21$ кг, девушек $56,66 \pm 0,43$ кг.

Таблица 1. Соматометрические показатели физического развития студентов, $M \pm m$

Показатели	Студенты	
	Юноши	Девушки
Рост, см	$176,76 \pm 0,63$	$163,12 \pm 0,33$ *
Масса тела, кг	$69,56 \pm 1,21$	$56,66 \pm 0,43$ *
ОГК в покое, см	$84,14 \pm 0,78$	$72,36 \pm 0,31$ *
ОГК на вдохе, см	$90,09 \pm 0,8$	$76,77 \pm 0,32$ *
ОГК на выдохе, см	$82,49 \pm 0,81$	$70,73 \pm 0,31$ *
Экскурсия, см	$7,81 \pm 0,22$	$6,03 \pm 0,11$ *

*- $p < 0,05$ - при сравнении юношей и девушек

Установлено, что у девушек окружность грудной клетки составила в покое $72,36 \pm 0,31$ см, на вдохе $76,77 \pm 0,32$ см, на выдохе $70,73 \pm 0,31$ см, экскурсия $6,03 \pm 0,11$ см, что достоверно выше по сравнению с юношами, у которых ОГК составили в покое $84,14 \pm 0,78$ см, на вдохе $90,09 \pm 0,8$ см, на выдохе $82,49 \pm 0,81$ см и экскурсия $7,81 \pm 0,22$ см ($p < 0,05$).

Распределение учащихся по группам физического развития в зависимости от уровня его гармоничности показало, что основную группу среди юношей и девушек составляли студенты, имеющие гармоничное физическое развитие. Так, количество юношей и девушек с гармоничным физическим развитием составило 77,0% и 13,6%.

Дисгармоничное и резкодисгармоничное отмечалось у 18,8% и 1,6% юношей и у 15,7% и 7,3% девушек (рис. 1).



Рис.1. Распределение юношей и девушек по степени гармоничности физического развития, %

В структуре гармоничного физического развития преобладал средний уровень. Так, доля юношей со средним уровнем физического развития составляла 25%, что на 2,2% меньше по сравнению девушками (27,2%). Низкое, высокое и ниже среднего физическое развитие встречалось несколько чаще у исследуемых юношей, чем у девушек (табл. 2). Развитие выше среднего имели больше девушек (19,6%), чем юношей (13,9%). Очень высокое развитие зарегистрировано больше среди юношей - 3,7%, чем среди девушек - 0,8%. Количество юношей и девушек с очень низким физическим развитием было примерно одинаковое - 2,8% и 2,7% соответственно.

Дисгармоничное развитие имели 15,7% юношей и 18,8% девушек, преимущественно за счет избытка массы тела (7,4% и 6,8%). За счет дефицита веса физическое развитие стало дисгармоничным у приблизительно одинакового количества юношей и девушек 2,8% и 2,7%. Установлено, что дисгармоничное физическое развитие за счет низкого роста зарегистрировано больше у девушек (5,0%), чем у юношей (1,8%). Количество девушек с дисгармоничным развитием за счет высокого роста выявлено 4,3%, юношей - 3,7%. Резко дисгармоничное физическое развитие выявлено у студентов, как среди юношей, так и среди девушек, за счет высокого (0,9% и 1,3%) и низкого (1,8% и 2,8%) роста, дефицита (0,9% и 0,8%) и избытка (3,7% и 2,7%) массы тела.

Таблица 2. Распределение юношей и девушек по уровню гармоничности физического развития, %.

Физическое развитие		Студенты	
		Юноши	Девушки
Гармоничное	очень низкое	2,8	2,7
	низкое	6,5	4,3
	ниже среднего	14,8	13,8
	среднее	25	27,2

	выше среднего	13,9	19,6
	высокое	10,3	5,2
	очень высокое	3,7	0,8
Дисгармоничное	за счёт избытка массы тела	7,4	6,8
	за счёт дефицита массы тела	2,8	2,7
	за счёт низкого роста	1,8	5,0
	за счёт высокого роста	3,7	4,3
Резко дисгармоничное	за счёт избытка массы тела	3,7	2,7
	за счёт дефицита массы тела	0,9	0,8
	за счёт высокого роста	0,9	1,3
	за счёт низкого роста	1,8	2,8

Нерациональное и неадекватное питание студентов может привести к изменению их пищевого статуса, оцениваемого по показателю индекса массы тела-индекса Кетле (табл. 3.).

Установлено, что четверть студентов имели отклонения от нормы в пищевом статусе, как в сторону увеличения, так и в сторону уменьшения. Оптимальный пищевой статус определен у 74,1% юношей и 77,0% девушек. Доля юношей, имеющих избыточный пищевой статус, была больше на 6,8%.

Таблица 3. Распределение юношей и девушек в зависимости от пищевого статуса по показателю индекса массы тела (Индекс Кетле), %

Пищевой статус	Студенты	
	Юноши	Девушки
Недостаточный	7,4	13,1
Оптимальный	74,1	77,0
Избыточный	15,8	9,0
1-ая степень ожирения	1,8	0,5
2-ая степень ожирения	0,9	0,2
3-ая степень ожирения	-	0,2

С недостаточным пищевым статусом ситуация была обратной: девушек выявлено больше на 5,7%. Среди всех обследованных студентов были зарегистрированы лица с разными степенями ожирения. Так, с 1-ой степенью ожирения выявлено 1,8% юношей и 0,5% девушек, со 2-ой степенью - 0,9% и 0,2% соответственно, с 3-ей степенью встречались лишь девушки (0,2%).

Важно отметить, что усредненные показатели индекса Кетле у юношей ($22,2 \pm 0,34$ кг/м) достоверно выше ($p < 0,05$), чем у девушек ($21,9 \pm 0,15$ кг/м).

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ОШ МАМЛЕКЕТТИК УНИВЕРСИТЕТИНИН ЖАРЧЫСЫ. МЕДИЦИНА

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**STUDY ON THE PREVALENCE OF HEPATITIS B VIRUS INFECTION IN ODISHA
STATE OF INDIA (2021-2022)**

Индиянын Одиша штатында вирустук В гепатитинин таралышын изилдөө (2021-2022)

Изучение распространенности вирусного гепатита В в индийском штате Одиша (2021-2022 гг.)

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STUDY ON THE PREVALENCE OF HEPATITIS B VIRUS INFECTION IN ODISHA STATE OF INDIA (2021-2022)

Abstract

Viruses has a more impact on a human population. Hepatitis means the inflammation of the liver; it's most commonly affected by the viruses. The hepatic viruses consist of A, B, C, D, E. The hepatic viruses A and E are spread by Faeco-oral route and B, C, D are spread by parenteral route. And recorded as the major cause of hepatitis . All types of viral hepatitis are seen in indian population. WHO recommends HB vaccination at birth to tackle the burden of hepatitis B. Among which the Odisha state in the eastern part of India is most prevalent to hepatitis b viral infection the most common reason of it is Odisha consist of the 1/3 rd of the tribal population of the India. We show the comparison between the tribes and the particularly vulnerable tribal population.

Keywords: viral hepatitis, HVB, Tribal Population, PVTGs, Serological survey.

Индиянын Одиша штатында вирустук В гепатитин таралышын изилдөө (2021-2022) **Исследование распространенности вирусного гепатита В в индийском штате Одиша (2021-2022 гг.)**

Аннотация

Вирустар адам популяциясына көбүрөөк таасир этет. Гепатит боордун сезгенишин билдирет, көпчүлүк вирустар ага таасир этет. Вирустук гепатиттердин А, В, С, D, E түрлөрү бар. Вирустук гепатиттин А жана Е түрлөрү фекалдык - оралдык жолу менен, ал эми В, С, D вирустары парентералдык жол менен таралат жана вирустук гепатиттердин негизги себеби болуп эсептелет. Вирустук гепатиттин бардык түрлөрү Индия калкында кездешет. ДССУ вирустук гепатитти азайтуу үчүн ымыркай төрөлгөндө В гепатитине каршы эмдөөнү сунуштайт. Алардын арасында Индиянын чыгыш бөлүгүндөгү Одиша штатында вирустук гепатит В инфекциясы эң көп таралган. Одиша Индиянын уруулук калкынын 3/1 бөлүгүн түзөт. Биз уруулар менен өзгөчө аялуу уруулук калктын катмарын салыштырууну көрсөтөбүз.

Аннотация

Вирусы оказывают большее воздействие на человеческую популяцию. Гепатит означает воспаление печени; Чаще всего вирусы поражают ее. Разновидность вирусных гепатитов А, В, С, D, E. Вирусные гепатиты А и Е распространяются фекально-оральным путем, а вирусы В, С, D распространяются парентеральным путем и зарегистрированы как основная причина гепатита .Все типы вирусных гепатитов наблюдаются у индийского населения. ВОЗ рекомендует вакцинацию против гепатита В при рождении с последующим введением двух или трех доз, чтобы снизить бремя гепатита В .Среди которых штат Одиша в восточной части Индии наиболее подвержен вирусной инфекции гепатита В. Наиболее распространенной причиной этого является то, что Одиша состоит из 1/3 племенного населения из Индии. Мы показываем сравнение между племенами и особенно уязвимым племенным населением.

Ачкыч сөздөр: вирустук гепатит, ВГВ, уруулук популяция, өзгөчө алсыз уруулар, серологиялык изилдөө.

Ключевые слова: Вирусный гепатит, ВГВ, племенная популяция, ПВТГ, серологическое исследование.

Objective

The objective of the study is to estimate the prevalence of the hepatitis B, C, D in the patient who are attending the hospital depends on the antigen (surface Ag, Core Antigen) and Antibodies present in the blood and depend on the antigen and antibodies interpretation is made.

Introduction

With a prevalence of 3–4.2% of Hepatitis B surface antigen (HBsAg) and 40 million HBV carriers, India ranks in the intermediate endemic zone for the Hepatitis B virus (HBV) infection in the world. (WHO Factsheet-b- World Hepatitis Day, 2016) Odisha, an eastern state of India, has the third-highest percentage of tribal population in the country and limited information is available regarding the prevalence of HBsAg among them. The present study attempted to estimate the prevalence of HBsAg among the 35 Scheduled tribal (ST) communities and 5 Particularly Vulnerable Tribal Group (PVTG).

Odisha, a state in the eastern region of India, is a home to 62 different tribal community and 13 Particularly Vulnerable Tribal Group (PVTG). A Particularly vulnerable tribal group or PVTG previously known as a Primitive tribal group is a sub- classification of Scheduled Tribe or section of a Scheduled Tribe that is considered more vulnerable than a regular Scheduled Tribe

Hepatitis B formerly known as (Serum antigen) is an acute systemic infection with major pathology in the liver. Transmitted usually by parenteral route .it's an acute self-limiting infection, having long incubation period (4 weeks to 6 month). In approximately 5 – 15 percent of cases HBV infection fails to resolves and affected individual the become persistent carrier of the virus. HBV virus may cause progressive liver disease includes chronic acute hepatitis and hepatocellular carcinoma. There is also close association of Hep - B and primary liver cancer and it is considered as a global threat worldwide.

Contaminated blood is the main source of infection, although the virus has been found in the body secretion such as Saliva, vaginal secretion and semen of infected person and in the health care worker

Although immunization remains the most effective way to control the spread of HBV infection, it is estimated that every year at least 27 million children worldwide do not receive the basic doses of immunizations. According to World Health Organization (WHO), one-third of the global population (two billion people) has been infected with hepatitis B virus. In 2013, other viral hepatitis accounted for 1.45 million deaths with 63% increased burden of deaths than that from 1990 of 0.89 million deaths. The prevalence of hepatitis B virus varies between 5 to 20% in the developing countries.

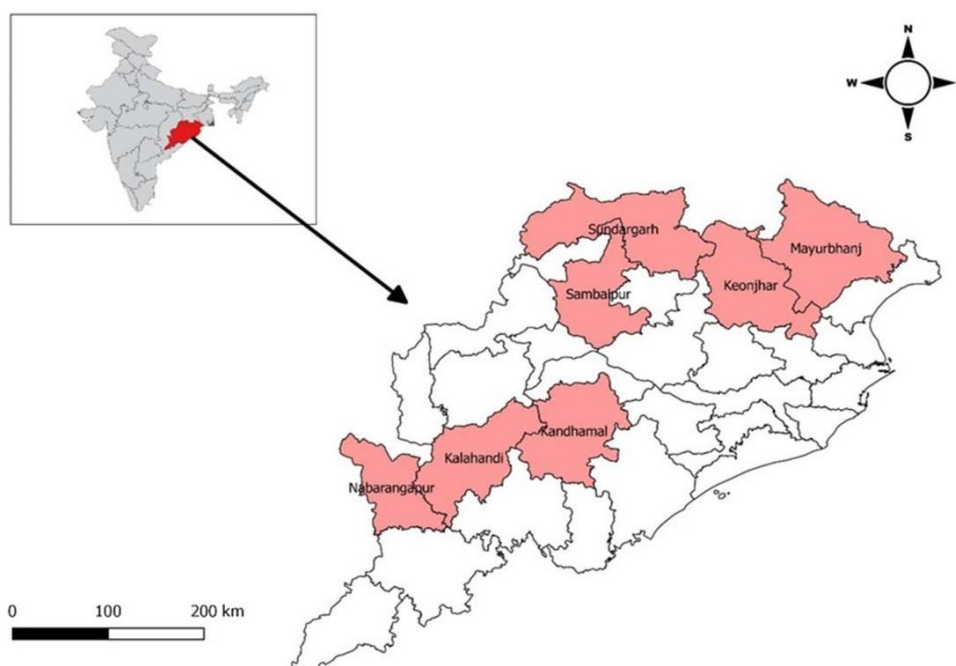
Methodology

India is more prevalent to hepatitis B, In india many states having hepatitis but odissa is the state in the eastern part of the india. Has largest Scheduled Tribes population (22.85% of ST population) with 62 Scheduled Tribes and 13 Particularly Vulnerable Tribal Groups (PVTGs).they live in the forest areas and the hilly areas which are socially and economically

margined. These tribal population are also at higher risk of facing various public health issues. A population-based, age-stratified, cross-sectional study design was adopted for the study. (<https://pubmed.ncbi.nlm.nih.gov/32318373/>)

Seven tribal predominated districts were selected for the study.

1. Kalahandi
2. Kandhamal
3. Nabarangpur
4. Mayurbhanj
5. Keonjhar
6. Sambalpur
7. Sundargarh

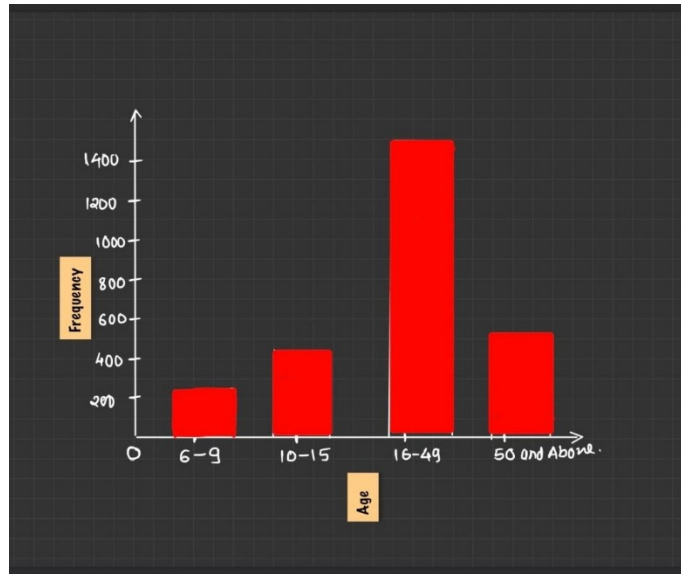


Sampling Framework

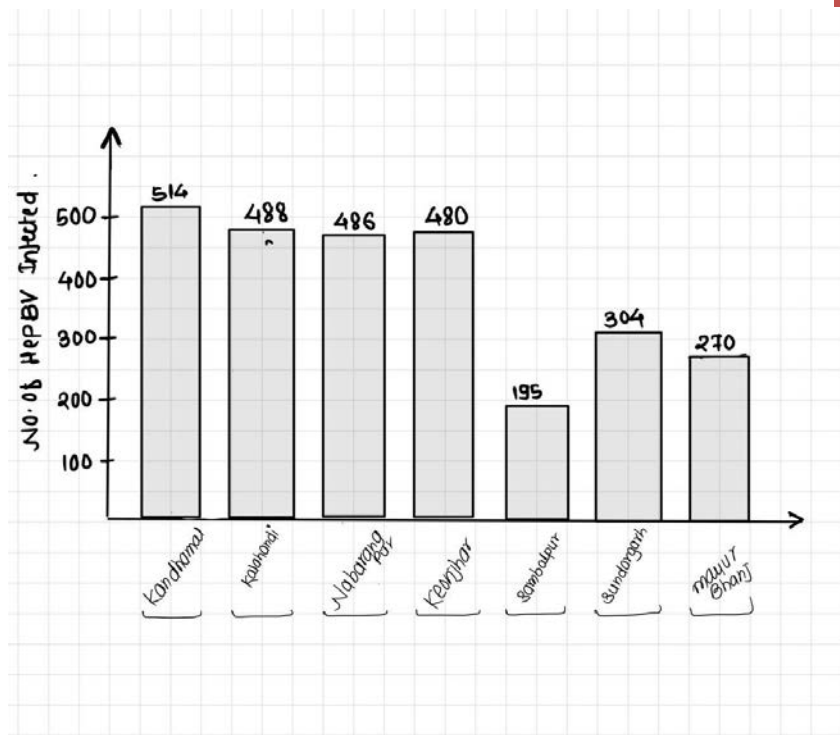
A multi-stage random sampling method was used in each district. Villages within each district (clusters) were selected through probability proportionate to size method. Sample size for each district was calculated to be 395 (rounded off to 400) with an assumption of an expected prevalence of 50% (reported in previous surveys), relative precision of 16%, design effect of 2.5, and non-response rate of 10% for a 95% level of confidence. Ten clusters in each district (total 70 clusters) were selected using the PPS methodology using household population size from the census. From each cluster, at least 40 individuals (4 with age 6–9 years, 8 with age 10–17 years and 28 aged 18 years and above) were enrolled in the survey (<https://pubmed.ncbi.nlm.nih.gov/36629188/>). Enrolment of a minimum number of individuals in each age group was ensured so that the overall distribution of the sampled population will be comparable to the age structure of the population of the state. Therefore, a minimum of 40 tribal individuals from each cluster and 400 individuals from 10 clusters of each tribal predominated district were enrolled except for three districts Mayurbhanj, Sambalpur, and

Sundargarh (due to lack of sufficient volume of samples).

Lab diagnosis: HBsAg (a marker of chronic infection) screening, liver function test, SGOT, SGPT, ALP, total bilirubin, direct bilirubin, and albumin.



(On the basis on the survey done on 2021-2022)



(Graph between No. of hepatitis B patient and district 2021-2022)

Variables	Frequency	Proportion (%)	HBsAg positive n (%)	Prevalence (95% CI)	HBV DNA (mean±SD) (IU/mL)
Age					
6–9	279	10.2	5 (1.79)	0.66–4.37	8.33±8.24
10–15	450	16.4	11 (2.44)	1.29–4.46	19.24±21.19
16–49	1,497	54.7	44 (2.94)	2.17–3.96	17.44±18.79
50 and above	511	18.7	10 (1.96)	0.99–3.69	8.09±8.56
Gender					
Male	1,176	43.0	26 (2.21)	1.48–3.27	16.17±17.10
Female	1,561	57.0	44 (2.82)	2.08–3.80	17.74±18.93
Districts					
Kalahandi	514	18.8	24 (4.67)	3.08–6.97	18.17±19.19
Kandhamal	488	17.8	23 (4.71)	3.07–7.09	10.08±10.69
Nabarangpur	486	17.8	3 (0.62)	0.16–1.95	2.08±2.48
Keonjhar	480	17.5	9 (1.88)	0.92–3.66	17.64±18.42
Mayurbhanj	270	9.9	2 (0.74)	0.13–2.94	–
Sambalpur	195	7.1	1 (0.51)	0.03–3.26	–
Sundargarh	304	11.1	8 (2.63)	1.23–5.32	15.96±16.77
Ethnicity					
Scheduled tribes	2,409	88.0	39 (1.62)	1.17–2.23	17.70±18.96
PVTG	328	12.0	31 (9.45)	6.61–13.27	16.70±17.89

(on the survey done in 2021-2022)

Result

Total of 2,737 sera specimens collected from tribal population aged 6 years and above were tested for HBsAg. This included 279 (10.2%) sera from children aged 6–9 years, 450 (16.4%) from participants aged 10–15 years, 1,497 (54.7%) from participants aged 16–49 years, and 511 (18.7%) participants aged 50 years and above. About 1,176 (42.9%) of the sera tested were from male (Table 1). The district- wise and tribe- wise distribution of participants is provided in graphs respectively. Of the 2,737 sera tested, 70 (2.56%; 95%CI: 2.01–3.24) were positive for HBsAg. The PVTGs had a significantly higher prevalence of HBsAg than other STs HBsAg positivity was recorded as 1.79% (n=5); 2.44% (n=16); 2.94% (n=44); and 1.96% (n=10) in the age group of 6–9 years, 10–15 years, 16–49 years, and above 50 years, respectively. The HBsAg positivity was detected as 14.18 and 6.06% among the PVTGs, Kutia Khond, and Paudi Bhuyan tribes. Among the Scheduled tribes, the prevalence of HBsAg was highest among Rajuar (6.25%) followed by Gond (6.0%), Kol (4.26%), Gondo (4%), Khond (3.6%), Bhuyan (3.13%), and Savar (2.36%)

Among the 70 HBsAg positive individuals, 30 (42.9%) were found positive for HBV DNA. The viral load among HBsAg positives ranged between 0.10×10^2 – 6.84×10^8 IU/mL (Supplementary Table S1). The viral load among the HBsAg positives in the age group of 6–9 years was 0.10×10^2 – 7.47×10^3 IU/mL. Among the Kutia Khond PVTGs, 8 out of 20 HBsAg positive (40%) showed the presence of HBV DNA with viral load of 0.4×10^2 – 1.34×10^5 IU/mL. Six out of 10 (60%) HBsAg positive Paudi Bhuyan PVTGs showed the presence of HBV DNA with viral load of 0.17×10^2 – 4.29×10^7 IU/mL. Both the PVTGs were first time surveyed for HBsAg prevalence and showed high viral load indicating a high potential to transmit the virus.

Tribes	Districts present	Population covered	HBsAg positive n (%)
Scheduled tribe			
Bhatara	Nabarangpur	22	0
Bhatra	Nabarangpur	340	3 (0.88)
Bhuiya	Keonjhar, Sundergarh, Mayurbhanj, Sambalpur	36	0
Bhuyan	Keonjhar, Sundergarh, Mayurbhanj, Sambalpur	64	2(3.13)
Gond	Kalahandi, Nabarangpur	100	6 (6.00)
Gondo	Keonjhar, Sambalpur, Kalahandi	50	2 (4.00)
Juang	Keonjhar	64	0
Khond	Kandhamal, Kalahandi	333	12 (3.60)
Kisan	Sundergarh, Sambalpur	152	0
Kol	Keonjhar, Mayurbhanj	47	2 (4.26)
Kolha	Mayurbhanj, Keonjhar	47	0
Kond	Kandhamal, Kalahandi	176	1 (0.57)
Kora	Keonjhar	21	0
Munda	Sundergarh, Sambalpur, Keonjhar	128	1 (0.78)
Oraon	Sundergarh, Sambalpur, Keonjhar	65	0
Rajuar	Mayurbhanj	16	1 (6.25)
Santal	Mayurbhanj, Keonjhar	34	0
Saora	Kalahandi	25	0
Savar	Kalahandi	297	7 (2.36)
Sounti_Bhumia	Keonjhar, Mayurbhanj	29	0
Others (Bathudi, Bhumij, Binjhal, Dadua, Didayi, Gadaba, Ghara, Kawar, Kharia, Kharwar, Korua, Koya, Madia, Mundari, Paroja, etc.)	Keonjhar, Sundergarh, Mayurbhanj, Sambalpur, Kalahandi, Kandhamal, Nabarangpur	366	2 (0.55)
PVTGs			
Dongria_Kondh	Kalahandi	1	1 (100.00)
Kutia_Khond	Kalahandi, Kandhamal	141	20 (14.18)
Lanjia_Saora	Kalahandi	1	0
Paudi_Bhuyan	Sundargarh, Keonjhar	165	10 (6.06)
Saora	Kalahandi	17	0

All the HBsAg positive individual had normal SGPT and 11 individuals had abnormal SGOT (Supplementary Table S1). Among these 11 individuals, 6 had the HBV DNA. Eighteen individuals with HBsAg had abnormal ALP and 8 among them had the presence of HBV DNA. Among all the HBsAg positive individuals, mean SGOT,

ALP, Total Bilirubin, and Albumin levels were 64.96 U/L, 255.67 U/L, 0.75 mg/dL, and 5.27 g/dL, respectively. Direct Bilirubin were normal among all the HBsAg positive individuals.

Discussion

In the analysis two of these PVTGs, **Kutia Khond (Kalahandi & Kandhamal)** and **Paudi Bhuyan (Sundargarh & Keonjhar)**, showed a higher prevalence of HBV infection, although all five PVTGs included in the study share similar socio-cultural aspects, geographical location, and relative isolation from the general population.

The present study first-time documents the prevalence of HBsAg among the major tribal population residing in the eastern state of the country. To effectively allocate resources in order to prevent, test for, and treat viral hepatitis, these updated data on HBV prevalence will be useful for assessing mortality from HBV associated cirrhosis in state level. Based on the varying prevalence of HBV in certain populations, more effort and resources must be devoted to educating the community and children on Hepatitis B and its serious complications.

study has key limitations, firstly, in the main survey, we did not include children younger than 5 years of age for logistical reasons. Secondly, we did not collect

information about hepatitis B vaccination from the participants, considering issues regarding parental recall and non-availability of vaccination cards and lastly inability to test different other markers of Hepatitis B infection due to scarcity of sample volume.

Conclusion

The study documents high rates of HBV infection in some of the particularly vulnerable tribal communities residing in Odisha, eastern India. The study findings could be considered as an interim assessment of the status of Hepatitis B infection among the tribal communities and PVTGs residing in Odisha state. About 2% of the children born after the introduction of Hepatitis B vaccine were positive for HBsAg? indicating the need to improve the coverage of three doses of Hepatitis B vaccine in India. The study also highlights the need for a statewide survey of Hepatitis B infection and risk factors, coverage and impact of the Hep B vaccination program introduced in 2010–2011 in Odisha with special reference to the ST and PVTG population of the state.

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**CASE REPORT: BRUGADA-LIKE ECG PATTERN IN PATIENT AFTER SUCH AS
LONG-TERM OUTCOME OF COVID-19**

Клиникалык жагдай: пациентте Бругадага окшош ЭКГ үлгүсү COVID-19дун узак
мөөнөттүү татаалдыгы

Клинический случай: Бругада-подобная ЭКГ картина у пациента, как отдаленное
осложнение COVID-19

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CASE REPORT: BRUGADA-LIKE ECG PATTERN IN PATIENT AFTER SUCH AS LONG-TERM OUTCOME OF COVID-19

Abstract

This article presents a clinical case of a patient who developed a Brugada-like electrocardiogram (ECG) pattern as a delayed complication after recovering from COVID-19. Brugada syndrome is a rare genetic disorder characterized by abnormal changes on the ECG and an increased risk of sudden cardiac death. Although the association between COVID-19 and cardiovascular complications is well-studied, the development of Brugada-like ECG changes in COVID-19 patients is a rare occurrence. This clinical case emphasizes the importance of early detection and appropriate management of cardiac complications in patients recovering from COVID-19, including the development of Brugada-like ECG changes. Consideration of these factors is crucial for optimal patient care and reducing the risk of sudden cardiac death.

Keywords: COVID-19, SARS-CoV-2, arrhythmia, Brugada syndrome, Brugada-like ECG pattern, implantable cardioverter-defibrillator.

Клиникалык жагдай: пациентте Бругадага окшош ЭКГ үлгүсү COVID-19дун узак мөөнөттүү татаалдыгы

Аннотация

Бул макалада COVID-19дан айыккандан кийин Бругадага окшош электрокардиограмманы (ЭКГ) кеч татаалданган бейтаптын клиникалык окуясы берилген. Бругада синдрому ЭКГнын анормалдуу өзгөрүүлөрү жана жүрөктүн капыстан өлүм коркунучу менен мүнөздөлгөн сейрек кездешүүчү генетикалык оору. COVID-19 менен жүрөк-кан тамыр окуяларынын ортосундагы байланыш жакшы түшүнүлгөнү менен, COVID-19 менен ооруган бейтаптарда Бругадага окшош ЭКГ өзгөрүүлөрүнүн өнүгүшү сейрек кездешет. Бул окуя COVID-19дан айыгып жаткан пациенттерде жүрөк оорусун эрте аныктоонун жана адекваттуу башкаруунун маанилүүлүгүн, анын ичинде Бругадага окшош ЭКГ өзгөрүүлөрүнүн өнүгүшүн көрсөтөт. Бул факторлорду эсепке алуу пациентке оптималдуу кам көрүүнүн жана капыстан жүрөктүн өлүмүнүн коркунучун азайтуунун ачкычы болуп саналат.

Клинический случай: Бругада-подобная ЭКГ картина у пациента, как отдаленное осложнение COVID-19

Аннотация

В данной статье представлен клинический случай пациента, у которого после выздоровления от COVID-19 развился Бругада-подобная картина электрокардиограммы (ЭКГ) в качестве отдаленного осложнения. Синдром Бругада представляет собой редкое генетическое заболевание, характеризующееся аномальными изменениями на ЭКГ и повышенным риском внезапной сердечной смерти. Несмотря на то, что связь между COVID-19 и сердечно-сосудистыми осложнениями хорошо изучена, развитие Бругада-подобных изменений на ЭКГ у пациентов с COVID-19 является редким явлением. Этот клинический случай подчеркивает важность раннего обнаружения и адекватного управления сердечными осложнениями у пациентов, выздоравливающих от COVID-19, включая развитие Бругада-подобных изменений на ЭКГ. Учет этих факторов является ключевым для оптимального ухода за пациентами и снижения риска внезапной сердечной смерти.

Ачкыч сөздөр: COVID-19, SARS-CoV-2, аритмия, Бругада синдрому, Бругада ЭКГ үлгүсү; имплантациялык кардиовертер дефибрилятор.

Ключевые слова: COVID-19, SARS-CoV-2, аритмия, синдром Бругада, картина ЭКГ типа Бругада; имплантируемый кардиовертер-дефибрилятор.

Introduction

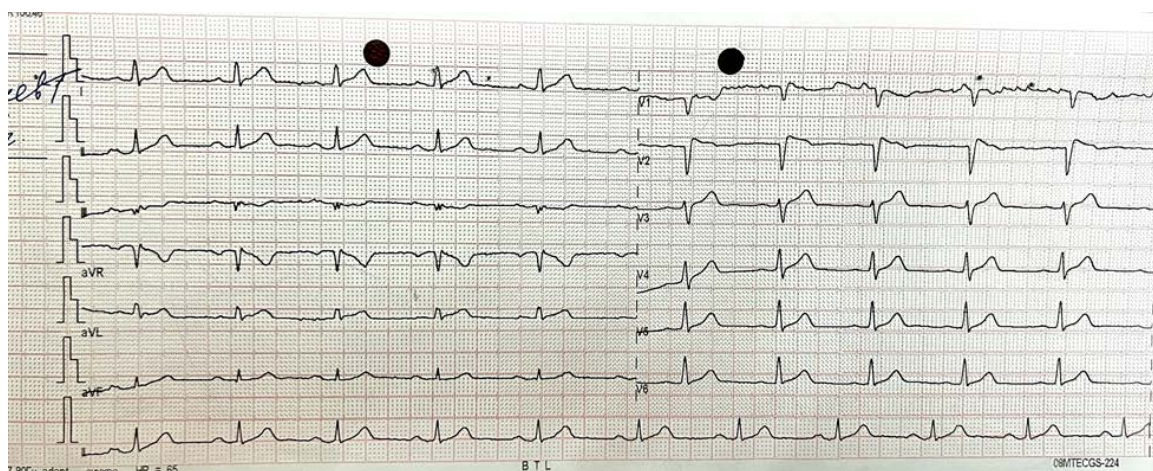
All countries have been challenged by the novel coronavirus, which one was recognized at the end of December 2019 in the city Hubei Province of China [1]. COVID-19 infection has quickly become widespread followed by a pandemic in 2020 [2]. Novel coronavirus predominantly affects the respiratory system, causing severe pneumonia and respiratory distress syndrome, also involvement of multiple organs and the cardiovascular system has been implicated [3,4]. Initial case reports from Wuhan, China, suggest that patients with established cardiovascular disease (CVD) may be at high risk of mortality [5]. Acute cardiovascular events in COVID-19 are acute myocardial injury, myocarditis, Takotsubo stress cardiomyopathy, acute coronary syndrome, arrhythmias and sudden cardiac death, venous thromboembolism and acute heart failure [6,7]. Supposedly, complication like an arrhythmogenic effect of COVID-19 can increase risk of cardiac arrhythmias. Due to events, symptomatic COVID-19 infection represents a risk factor for developing proarrhythmic complications for unmasking Brugada like ECG pattern [8].

The Brugada syndrome (BS) as a familial autosomal-dominant inherited arrhythmic disorder, was reported by Spanish cardiologists Josep and Pedro Brugada in 1992 [9,10,11]. Clinically BS is characterized by a life-threatening predisposition to syncope and cardiac arrest [12]. Electrocardiographic changes in BS include a special form of right bundle branch block (RBBB) with ST segment elevation in one or more right chest leads and absence of structural pathology of the heart, resulting in various life-treatening ventricular arrhythmias and increased risk of sudden cardiac death (SCD) [13]. Pathogenesis in BS is determined by genetic dysfunction of transmembrane ion channels- blocking the flow of sodium ions into cardiomyocytes [14].

In this article, we report case of young man with a Brugada-like ECG after sudden cardiac arrest who previously had a severe form of novel coronavirus disease.

Case presentation

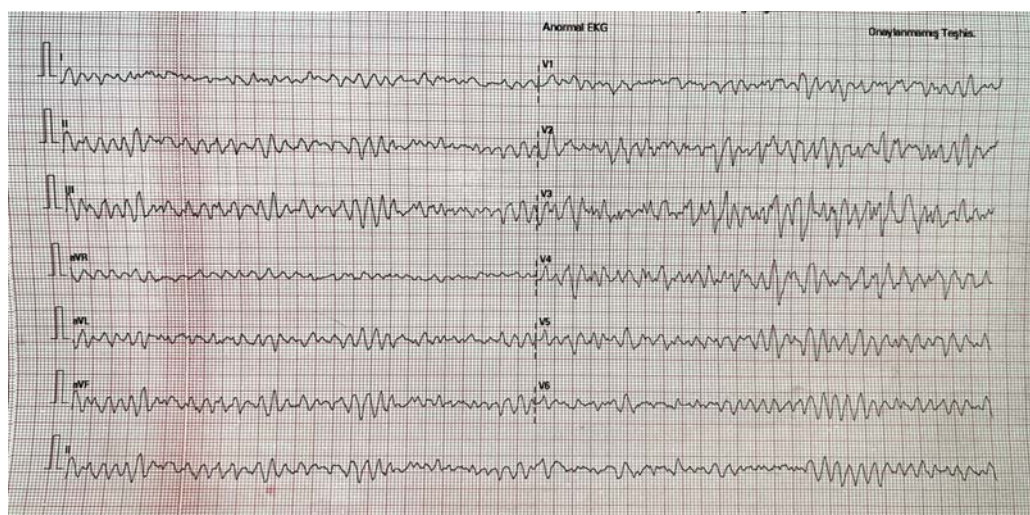
A 37-year-old Kyrgyz man presented himself to Medical Center Osh Cardio due to fatigue, palpitations, headaches and shortness of breath for two days. On his last month ECG (Pic.1) sinus rhythm with heart rate 65 per minute and right bundle branch block.



Pic 1. The 12-leads ECG a month ago.

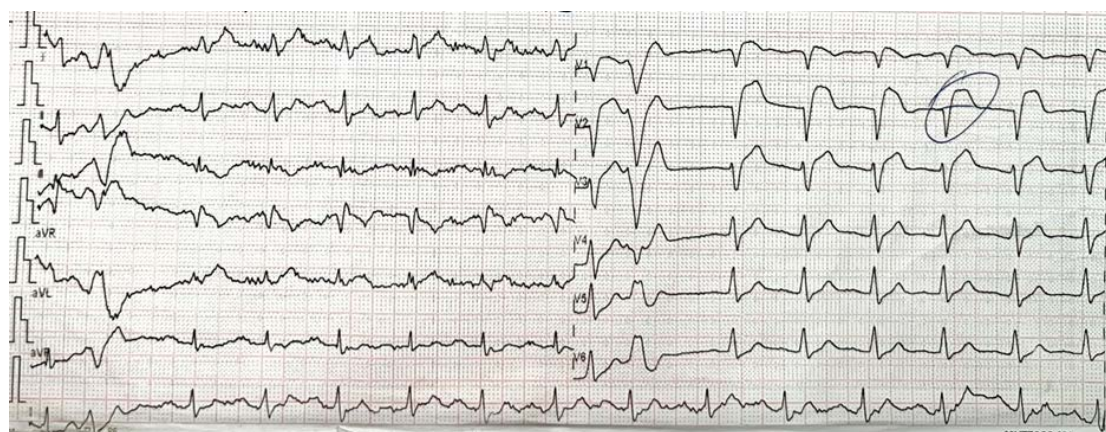
Patient admits that five month ago, three days after vaccination against COVID-19 (first dose of "Sputnik-V") , he felt weakness, general fatigue and was discharged to hospital with

severe pneumonia. Serology tests for COVID-19 at the time of admission to our center revealed the positive results for IgG -17,0 g/l and it indicates that patient had covid 19 infection recent past. He was otherwise healthy and doesn't have comorbidities. He did not report any prior history of sudden death, arrhythmias, myocardial infarction or syncope in relatives. Rare extrasystoles during day showed on Holter ECG monitoring the day before admission. During the examination of patient, he suddenly lost consciousness. The patient was urgently transferred to emergency department, where ventricular fibrillation was registered on the cardiac monitor (Pic. 2).



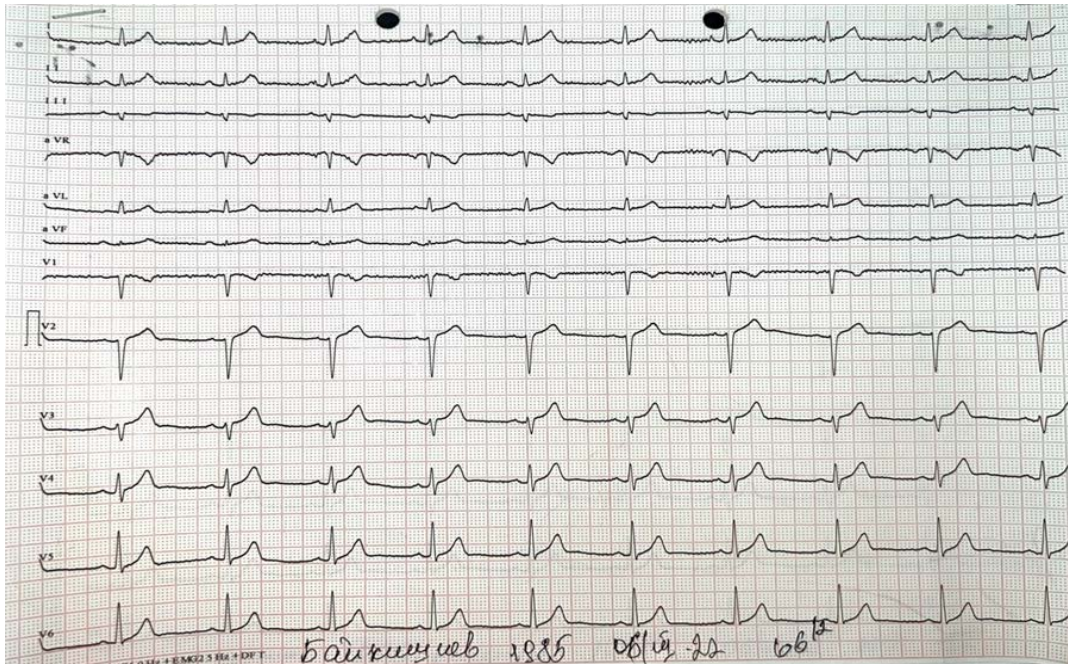
Pic 2. The 12-leads ECG in emergency department.

After first defibrillation with a current of 300J, sinus rhythm was restored on ECG, but showed ST-segment in V1, V2, V3 leads without reciprocal changes (Pic 3).



Pic 3. The 12-leads ECG after defibrillation with a current of 300J.

Laboratory investigation showed negative Troponin test. Transthoracic echocardiogram did not indicate any morphological abnormalities. The patient was taken for urgent coronary angiogram, which showed normal coronary arteries. After investigations as a prophylaxis measure, Implantable cardioverter defibrillator was implanted to the patient. On Fig. 4 demonstrates ECG after treatment, when it became unremarkable.



Pic 4. The 12-leads ECG - 13 days after.

Discussion

This case demonstrated Brugada-like ECG pattern in patient as a long term complication of COVID-19, not associated with fever. Higher prevalence of arrhythmogenic episodes with cardiac complications in patients with severe COVID-19 was observed in several studies [15,16]. One article indicates that high fever is known to be a considerable risk factor for proarrhythmic complications and sudden cardiac death in patients with BS [17]. BS is more common in Asian male adults, often with aborted cardiac arrest and have less family history of SCD [18]. Clinical symptoms are associated with ventricular fibrillation, which in our case could lead to sudden heart arrest of the patient. BS has specific ECG patterns, often in young and healthy individuals who are unaware of their condition until syncope or sudden cardiac arrest and usually it occurs most frequently between the ages of 38 and 48 [19]. Undoubtedly, our patient's parameters match with this description.

In this report, Brugada-like ECG pattern can be diagnosed as a Long-Term Outcome of COVID-19, which is important implications for clinicians. COVID-19 infection may serve as a risk factor for the development of long-term proarrhythmic complications due to inflammatory stress caused by COVID-19 infection. The goals of this case report was to describe the relationship between virus-related issues such as arrhythmias in COVID-19 infection not only in acute phase of disease, but also as a long-term complication with a transient Brugada-like ECG pattern and its predisposition to proarrhythmogenic episodes.

Conclusion

Case presentation with Brugada-like ECG pattern in patient as Long-Term Outcome of COVID-19 was not found and described before. We should be alert that COVID-19 can cause sudden cardiac arrest as a late complication. ECG should be done for all patients during COVID-19 illness, certainly after infection, and follow up by a cardiologist for at least one year.

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ОШ МАМЛЕКЕТТИК УНИВЕРСИТЕТИНИН ЖАРЧЫСЫ. МЕДИЦИНА

ВЕСТНИК ОШСКОГО ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА. МЕДИЦИНА

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УДК:

**THE CONTEXT OF GLOBALIZATION: A PERSON IS THE MAIN SOCIAL MEANING
OF SOCIETY**

Ааламдашуу контексти: Адам коомдун негизги социалдык мааниси

Контекст глобализации: Человек – главный социальный смысл общества

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THE CONTEXT OF GLOBALIZATION: A PERSON IS THE MAIN SOCIAL MEANING OF SOCIETY

Abstract

A person is a social meaning of society because society starts from one individual. Society is a group of individuals and these individuals give meaning to society otherwise bees also live in a social role-playing life but no philosopher ever said that "bees are the social animals" We humans are special we are unique from birth and we still are able to form society and live and helping each other out society is like a puzzle each piece is important to complete the puzzle and each individual is important to form society now that doesn't mean that society depends on individual but it depends on individuals but individual do hold the value as he/she was the starting point of society and the value or skillset he/she bring to the table of society because we humans are unique by nature we do have some similarities but we are never the same so what one can do other can't perfectly.

Keywords: the person, society, globalization, protagonist, philosophy, social animal.

Ааламдашуу контексти: Адам коомдун негизги социалдык мааниси

Контекст глобализации: Человек – главный социальный смысл общества

Аннотация

Адам коомдун социалдык мааниси, анткени коом бир индивидуал башталат. Коом инсандардын тобу жана бул инсандар коомго маани берет антпесе аарылар да социалдык ролду ойноп жашоодо жашашат, бирок эч бир философ "аарылар коомдук жаныбарлар" деп айткан эмес. коомду түзө алуу жана жашоо жана бири-бирине жардам берүү пазл сыяктуу ар бир бөлүк табышмакты аягына чыгаруу үчүн маанилүү жана ар бир инсан коомду түзүү үчүн азыр маанилүү, бул коом инсандан көз каранды дегенди билдирбейт, бирок жеке адамдардан көз каранды. ал коомдун башталгыч чекити болгон үчүн баалуулукка ээ болуңуз жана ал коомдун дасторконуна алып келет, анткени биз адамдар табиятыбыз боюнча уникалдуубуз, кээ бир окшоштуктарыбыз бар, бирок биз эч качан окшош эмеспиз, ошондуктан башканы кемчиликсиз кыла албайт.

Аннотация

Человек есть социальное значение общества, потому что общество начинается с одного человека. Общество – это группа индивидуумов, и эти индивидуумы придают смысл обществу, в противном случае пчелы также живут социальной ролевой жизнью, но ни один философ никогда не говорил, что «пчелы – социальные животные». Мы, люди, особенные, мы уникальны с рождения, и мы все еще способны формировать общество и жить и помогать друг другу общество похоже на головоломку, каждая часть важна для завершения головоломки, и каждый человек важен для формирования общества сейчас, это не означает, что общество зависит от человека, но оно зависит от людей, но от человека сохраняем ценность, поскольку он / она был отправной точкой общества, и ваша ценность или набор навыков, которые он / она привносит на стол общества, потому что мы, люди, уникальны по своей природе, у нас есть некоторые сходства, но мы никогда не одинаковы, так что можно делать другой косяк отлично.

Ачык сөздөр: адам, коом, ааламдашуу, каарман, философия, коомдук жаныбар.

Ключевые слова: человек, общество, глобализация, протагонист, философия, социальное животное.

What is globalization?

Globalization is the word used to describe the growing interdependence of the world's economies, cultures, and populations, brought about by cross-border trade in goods and services, technology, and flows of investment, people, and information. In simple terms, globalization is the process by which people and goods move easily across borders. Principally, it's an economic concept – the integration of markets, trade and investments with few barriers to slow the flow of products and services between nations.

Who is the person?

A person is an individual or a single entity. But in metaphorical sense we can also say that person is referred to as humans as whole.

What does social meaning means?

The interaction of individuals and the group, or the welfare of human beings as members of society.

What is the society?

A large group of people who live together in an organized way, making decisions about how to do things and sharing the work that needs to be done. All the people in a country or in several similar countries can be referred to as a society

The term 'society' is broader than 'human society'. Many other species are described as possessing a social way of life. Yet mere gregariousness, of the kind found in a herd of cattle or a shoal of fish, is not enough to constitute a society. Insects also possess a social way of life let's take an example: bees have their specific roles to play in a hive as the queen's only job is to lay eggs and a drone's job is to mate with the queen. The worker bees are responsible for everything else: gathering nectar, guarding the hive and honey, caring for the queen and larvae, keeping the hive clean, and producing honey. But bees are collectively called a hive not society.

- You see Society is a system, characterized by the objective laws of development.
- It is a system of human activity and its objective condition and result.
- A system of interaction between people, which promotes the coordination of efforts in achieving goals.
- System of society communication between people, realizing its interests on the basis of existing common cultural values.
- Society is a system of relation between social groups with their characteristic interests.
- Relation between the large macro social group-class, ethno-communities and expressing their interests.
- Society is a system of functional social institutions that provide the stable development of society.
- A system interrelated and mutually complementary spheres (economic, political, social and spiritual) in each of which the relevant needs and interests of society are realized.

Globalization & society

American sociologist *Talcott parsons* the founder of the structural functionalism in American sociology of XX century said social action is the backbone element of society.

There are 4 functions of social systems

- Adaptation
- Goal setting
- Integration
- Latency

These functions are provided by the relevant sub-systems

- Economic-politics
- Law
- Socialization

Each of which has a specialized nature. This is achieved by means of symbolic mediators – the {means of exchange} which serve as money, power, influence and value commitment. Globalization is related to the sub-system because it includes elements that has a global effect like economics and politics which can affect not only one country or society these effects can reach the whole earth.

Philosophy

In philosophy one of the central questions is the question of a man and his place in the World, in a *SOCIETY* and about the sense of his life.

Any philosophy is an outlook, a set of the most general views on the world and a place in it of a person. However, not every outlook is philosophy.

- A worldview is the fundamental cognitive orientation of an individual or a society encompassing the entirety of the individual or a society's knowledge and point-of-view, including natural philosophy, fundamental, existential, and normative postulates; or themes, values, emotions, and ethics.

- Worldview is a system of views on the objective world and a place in it of a person, on the relations of a person to the reality surrounding him and to himself, and also the beliefs, ideas, activity principles and knowledge, valuable orientation which have been developed on the basis of these views.

There are three levels of a worldview.

- *Sensation of the world*

An unsystematic picture of reality where the leading role belongs to emotional-imaginative reproductive of the world.

- *Perception of the world*

The formation of a certain system of ideas about the world in which the reality appears as a whole;

- *Understanding of the world*

The disclosure of the essence of an event, of a process.

- Humans are the important figures in the world and society matter of fact humans are the one who came up with the idea and the name 'society'.
- You see philosophy, science, religion, everything is a product of some individual human asking a question and then finding the answer for that.
- In religion picture of the world is built on the principle of descending hierarchy.

(GOD - MAN - ANIMAL - PLANT - INANIMATE NATURE.)

- In Islam humans are also dignified in Quran [QURAN=17-70] Allah says:

﴿وَلَقَدْ كَرَّمْنَا بَنِي آدَمَ وَحَمَلْنَاهُمْ فِي الْبَرِّ وَالْبَحْرِ وَرَزَقْنَاهُمْ مِنَ الطَّيِّبَاتِ وَفَضَّلْنَاهُمْ عَلَى كَثِيرٍ مِمَّنْ خَلَقْنَا تَفْضِيلًا ۝٧٠﴾

“Indeed, we have dignified the children of Adam, carried them on land and sea, granted them good and lawful provisions, and privileged them far above many of Our creatures.”

Now to solve the topics objective we will ask three Questions?

- What?
- How?
- Why?

What?

- So, we know that society is a group of individuals living together and social meaning means the relation between two individuals.
- But individuals why are they so important when the society means a group of people?
- *What is the value of individuals?*
- You see all individuals have their own value that they bring to the society each individual is different and have a different skillset.

As *SOPHISTS* a class of teachers in Greece. They were orators, public speakers. For them

“The search of truth was not a top priority. They put the individual human being at the center of thought and value.”

The sophists developed this idea based on experience and knowledge because they wondered in search for money and they taught people and got the money in return as fees. So, they gave value to humans so there must be a reason that they did this.

- From the *Renaissance philosophy* (XIV-XVI cc.):

“A new view on the place of man in the universe appeared. The man is in the center of the Universe.”

- And in ancient philosophy:

“Man was thought of as a small world in general composition of the universe, as a reflection and symbol of the universe understood as a spiritualized organism” because if we look at the universe the main elements that form this universe are *Carbon, Oxygen, Hydrogen and Nitrogen*. And the elements that make up (96.2%) of the human body are *Carbon, Oxygen, Hydrogen and Nitrogen*. So, saying human is a small universe of its own is not totally wrong.

- And KANT a German philosopher:

“He was the first in history of philosophy who justified the creative nature of human knowledge, thought and action;”

- SO, it's clear that man have such significance in philosophers' point of view.

Ludwig Andreas van Feuerbach went as far and said that

“Man is the highest creation of nature. Man must be in the center of philosophical system.”

So, the answer to the question *What is the value of individuals?* Is that we hold such value because we are humans and its clear the great philosophers of their time thought the same.

HOW?

Now to answer how we as individuals or as the topic says as a person hold this value let's see

French philosophers: Jean Sartre and Albert Camus.

These two were the main representatives of existentialism in Europe. In Starter's existentialism

There were two main features.

- The first feature expressed in the fact that the emergence of human reality is the {*Absolute event*}.

- The second feature is expressed in the characteristic of human freedom.

(Sartre says that man is free, because he has no nature, which would be able to predetermine his behavior).

Birth gives man existence as a natural individual. Although he/she come into the world with insufficiently formed anatomical and physiological systems, they are genetically programmed as uniquely human.

- Humans have some innate abilities like empathy, sympathy, curiosity, creativity, adaptability, reasoning etc. & much more that other species lack which gives us an upper hand in every area of nature and condition as time passes because humans are extremely adaptable.

- In society each individual has some specific roles to carry and with this role playing we help each other out let's take an example I am the writer and you are the reader then you will talk about my writings to someone at that moment you will be a narrator by doing that you will share your knowledge that you got by reading my research and I will get a new reader to read my research now we both had a specific role that we played and by doing that we Unintentionally helped each other. But other spices got role playing ability to like bees, aunts, wolfs etc. the difference in us and them is humans are extreme flexible and adaptable if a problem arise, we will all adjust to solve that problem no matter what that problem is but if something goes wrong in bees hive, they can't fix it because they play their roles as default but we humans have a choice that gives us the element of adaptability. And they cooperate like humans. As Historian *Yuval Noah Harari* said we humans runs and control the world Because we are the only organisms that can cooperate both flexibly and in very large numbers. And we also have abilities like trust and imagination that are unique only to humans.

- *Herbert Spencer* treated society as an organism similar to the biological organism with different organs, performing special functions.

Why?

Aristotle:

- We all heard the famous line that “Human beings are social animals” but that’s only one point out of his whole saying he said and I quote

“Man is by nature a social animal; an individual who is unsocial naturally and not accidentally is either beneath our notice or more than human. Society is something that precedes the individual” (*MAN CANNOT LIVE ALONE*)

- No one can survive alone for a long period of time that means each and every individual matters because in a group of 10 there are 10 individuals that makes a group of 10.

- Let’s take an example imagine a cafe shop one person will be responsible for taking orders, one will be the waiter, one will be the chief, one will be the cleaner, one will be the supplier, and one will be the customer, to perform a simple function of ordering a cafe making it and delivering took 6 different individuals to perform a simple task like that.

- That’s the same in every class of society, every work place and even in living places.

- Every invention was the idea of some random individual and then it became the thing we know and use.

- Individuals matter because they give meaning and purpose to everything we do.

- Person is a social meaning of society because people combine to form a society and facilitate each other to give meaning to that society because there is a limit to what an individual can do.

- Now society depends on an individual but to a certain degree society doesn’t totally depend on an individual it depends on individuals.

- The limit to which the society depends on an individual depends on the status, wealth, popularity etc. And that will determine the extent of the individual’s value.

- Individual do matter but everyone is changeable.

let’s take an example “to run the countries we have presidents or prime ministers now they hold a lot of value because they are leaders of the country and make decisions on the behave of the whole country, they do matter a lot but if a president dies the country will still exist and a new president will be appointed”

- Now these political figures hold extreme importance but they are also changeable but one individual can be only changed by another individual.

- That’s the same in every part of society or department

- Judges in courts

- Officers in army

- CEOs in companies

- Scientists

Teachers etc. Each and every single one is important but changeable.

Protagonist

- Protagonist a main character in a story. Whole story revolves around this single entity called the protagonist of the story.

“I believe that every single one is the protagonist and the story is his own life and everyone else is the side character is his story now what kind of story that would be it depends on that single person how he lives or how his story ends” either it will be a happy ending or a sad one a successful or flopped one. But to know the ending we have to accept the role we got Main character in our and side in others.

- What I mean is in my life everything revolves around me because I'm the one who matters the most. It's my life I'm the one who will say what's bad what's good in my perspective I'm the centripetal point in my existence because from my side everything exists because I'm there to give meaning to it like a house or a car if I own a house so then that's Safie's house if am not there as an owner it's just a random house. It doesn't matter what I am I'm the main or leading role in my life even the president of the country is a side character because this life story is about me so I'm the main character and a protagonist. Which means I am important and that's the same in every human being. But,

“Every protagonist is a side character in others story”

- We are special because we are humans and we are alive.
- The final question that arises is

“Who is the creator of the story?”

And the one and only answer is

“ALLAH(GOD)”

Conclusion

“To sum up the topic we can conclude that a person is the main social meaning of society just in like stories we see one side of the story from the prospective of one character and say this is his/her story. In society we need all kind of people to have a diversity so we can adjust however we want when time come each individual is unique so he/she bring something that other cannot person is main social meaning because one person is the beginning point of a large society. In other sense human are the social meaning of society because we are the one to come up all types societies and the conclusion can be this a person is referred to as society as a whole and just like in body different organs perform different functions different people perform different function in the society *“so yes, the person is the main social meaning of society”*.”

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RECURRENT URINARY TRACT INFECTION IN WOMEN (OBSERVATIONAL STUDY BETWEEN KYRGYZSTAN AND INDIA)

Аялдардын заара чыгаруу жолдорунун кайталануучу инфекциясы (Кыргызстан менен Индиянын ортосундагы обсервативдик изилдөө)

Рецидивирующие инфекции мочевыводящих путей у женщин (обсервационное исследование между Кыргызстаном и Индией)

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RECURRENT URINARY TRACT INFECTION IN WOMEN (OBSERVATIONAL STUDY BETWEEN KYRGYZSTAN AND INDIA)

Abstract

When it comes to recurrent urinary tract infection, India and Kyrgyzstan have very different approaches. In India, this infection is usually treated with antibiotics and preventive measures such as drinking plenty of fluids and maintaining good hygiene. However, in Kyrgyzstan, this condition is treated with antibiotics and traditional medicine – a combination of herbal products that includes tarragon, oregano, and St John's wart. This herbal formula has been proven effective against recurrent urinary tract infections. What's more, traditional medicine has fewer side effects than antibiotics. This makes it an attractive option for those who suffer from recurrent UTIs. Traditional medicine also takes a holistic approach to the condition and focuses on prevention as well as cure by addressing underlying causes such as poor nutrition or lifestyle factors that may contribute to the problem. For instance, it encourages the use of certain foods that are thought to help prevent the recurrence of UTIs. Overall, traditional medicine provides an effective alternative to treating recurrent urinary tract infections in both India and Kyrgyzstan – one with fewer side effects than antibiotics but also one that aims for long-term prevention rather than just short-term relief.

Keywords: recurrent UTI; vaginal colonization; preventive measures, cystitis.

Аялдардын заара чыгаруу жолдорунун кайталануучу инфекциясы (Кыргызстан менен Индиянын ортосундагы обсервативдик изилдөө)

Аннотация

Заара жолдорунун кайталануучу инфекциясына келгенде Индия менен Кыргызстандын мамилеси такыр башкача. Индияда бул инфекция көбүнчө антибиотиктер жана суюктукту көп ичүү жана гигиенаны сактоо сыяктуу алдын алуу чаралары менен дарыланат. Бирок Кыргызстанда бул ооруну антибиотиктер жана салттуу медицина – эстрагон, орегано жана Сент-Джон сөөлүн камтыган чөптөрдүн айкалышы менен дарылашат. Бул чөптөн жасалган формула заара чыгаруу жолдорунун кайталануучу инфекцияларына каршы натыйжалуулугу далилденген.

Анын үстүнө салттуу медицинада антибиотиктерге караганда терс таасирлери азыраак. Бул кайталануучу UTI менен жапа чеккендер үчүн жагымдуу вариант кылат. Салттуу медицина ошондой эле абалга комплекстүү мамиле кылат жана начар тамактануу же жашоо мүнөзүнүн факторлору сыяктуу негизги себептерди жоюу менен алдын алуу жана дарылоого басым жасайт. Мисалы, ал UTI кайталануусун алдын алууга жардам берет деп эсептелген кээ бир тамактарды колдонууга үндөйт.

Жалпысынан алганда, салттуу медицина Индияда да, Кыргызстанда да заара чыгаруу жолдорунун кайталануучу инфекцияларын дарылоо үчүн эффективдүү альтернатива болуп саналат – антибиотиктерге караганда терс таасирлери азыраак, бирок кыска мөөнөттүү жеңилдетүүнү эмес, узак мөөнөттүү алдын алууну көздөйт.

Ачкыч сөздөр: кайталануучу инфекция; кындын колонизациясы; алдын алуу чаралары, цистит.

Рецидивирующие инфекции мочевыводящих путей у женщин (обсервационное исследование между Кыргызстаном и Индией)

Аннотация

Когда дело доходит до рецидивирующей инфекции мочевыводящих путей, в Индии и Кыргызстане очень разные подходы. В Индии эту инфекцию обычно лечат антибиотиками и профилактическими мерами, такими как обильное питье и соблюдение правил гигиены. Однако в Кыргызстане это состояние лечат антибиотиками и народной медициной – комбинацией растительных продуктов, включающей эстрагон, душицу и бородавку продырявленную. Эта травяная формула доказала свою эффективность против рецидивирующих инфекций мочевыводящих путей. Более того, традиционная медицина имеет меньше побочных эффектов, чем антибиотики. Это делает его привлекательным вариантом для тех, кто страдает рецидивирующими ИМП. Традиционная медицина также использует целостный подход к состоянию и фокусируется на профилактике, а также на лечении путем устранения основных причин, таких как плохое питание или факторы образа жизни, которые могут способствовать возникновению проблемы. Например, он поощряет употребление определенных продуктов, которые, как считается, помогают предотвратить рецидив ИМП.

В целом, традиционная медицина представляет собой эффективную альтернативу для лечения рецидивирующих инфекций мочевыводящих путей как в Индии, так и в Кыргызстане – она имеет меньше побочных эффектов, чем антибиотики, но при этом направлена на долгосрочную профилактику, а не только на краткосрочное облегчение.

Ключевые слова: рецидивирующая ИМП; вагинальная колонизация; профилактические меры, цистит.

Introduction

Do you experience recurrent urinary tract infections (UTI) more often than you would like? If so, you are not alone. UTIs are incredibly common, especially in women of childbearing age. Unfortunately, their recurrence is equally frequent. Urinary tract infection (UTI) is one of the most common bacterial infections in both developed and developing countries. It is an annoying problem, especially if it happens repeatedly. Recurrent urinary tract infections (RUTI) affect millions of people every year but the rates are higher in certain parts of the world. Mabeck found that nearly one-half of the women who are not complicated UTIs resolved spontaneously and developed a recurrent UTI within the first year [1]. In a recent study of college women with their first UTI, 27% experienced at least one culture-confirmed recurrence within the 6 months following the initial infection [2] and 2.7% had a second recurrence over this time period. In a Finnish study of women aged 17–82 years who had E.coli cystitis, 44% had a recurrence within 1 year, 53% in women older than 55 years and 36% in younger women [3]. And also epidemiology data for older women are sparse, it is estimated that 10–15% of women over age 60 have frequent recurrences [4].

In India and Kyrgyzstan, recurrent UTIs are becoming increasingly widespread among the population. While both countries have similar levels of prevalence, there are also some differences – but why? In this article, we will look at what makes these two countries so different when it comes to recurrent UTIs and explore the risk factors and treatments available.

Overview of Recurrent Urinary Tract Infection

Recurrent urinary tract infection (UTI) is a common and usually painful condition that can be difficult to treat. In India and Kyrgyzstan, UTI affects a large number of people, particularly women and children. Research suggests that the prevalence of recurrent UTI is higher in India than Kyrgyzstan; however, both countries suffer from a lack of resources for diagnosis, treatment and prevention.

Recurrences are due to a persistent focus of infection (relapse), but the vast majority is thought to represent re-infection. Thus, among 464 episodes of acute uncomplicated cystitis in college women treated with a variety of antimicrobials, we have found that only 26 (5.6%) had persistent infection, defined as persistence of the initially infecting species within 1 week of the start of therapy [5–7].

Another study of 49 patients, mostly women, some of whom had ‘complicating factors’, 84% of recurrences were episodes of re-infection typically months apart [8]. E. coli strains causing UTI may, although appropriately treated and not found in repeated urine cultures in between, cause a new UTI up to 3 years later [9]. In a recent study of 23 women with recurrent UTI and 35 women with first episode UTI, E. coli strains were evaluated by chromosomal restriction fragment length polymorphism [RFLP] analysis using pulsed field gel electrophoresis [10]. It has also been hypothesized that infecting strains may resist clearance in the face of host defenses within the bladder by invading into the epithelium, and later cause recurrent UTI [11].

An exception would be the situation, where a post-treatment urine culture has been investigated and produced no growth of the pathogen in which case any subsequent recurrence is a re-infection. Most recurrences appear to occur in the first 3 months after the initial UTI [12, 13].

The symptoms of recurrent UTI include pain or burning during urination, frequent urination, cloudy urine, strong-smelling urine and abdominal pain. Risk factors for recurrent UTI include diabetes, kidney stones, use of certain medications or chemotherapy treatments and having an enlarged prostate gland. In both India and Kyrgyzstan, preventive measures such as drinking plenty of fluid to flush the bladder; emptying your bladder after sex; wiping from front to back after using the toilet; and avoiding using douches are important in managing the condition.

In both countries, recurrent UTI can be successfully treated with antibiotics if diagnosed early enough. However, due to the lack of healthcare access in both countries, many people do not receive treatment until their symptoms become more severe. As such, it is important for people at risk for recurrent UTI to see their doctor regularly and seek medical advice when symptoms persist despite home remedies or lifestyle adjustments.

Etiology

Results from the interaction of infecting *E. coli*. Strain with the woman's epithelial cells. In the healthy person, most uropathogens arises in the person's rectal flora and enter the bladder via urethra in the peri urethral and distal urethral colonization. Women with recurrent UTI have been shown to have an increase susceptibility to vaginal colonization with the uropathogens compared with the woman without a history of recurrent UTI.

Many host genetic, biologic, and behavioral factors, several of which are discussed below, appear to predispose young healthy women to uncomplicated UTI [14]. Local changes in the vagina, such as pH [15-16] and cervix vaginal antibody [17], and both urine and bladder defense mechanisms [18-22] may play a yet unidentified role in predisposing women to uncomplicated UTI.

Women with recurrent UTI have been shown to have an increased susceptibility to vaginal colonization with uropathogens compared with women without a history of recurrent UTI [23-26].

In women with recurrent UTI compared with controls, colonization with gram-negative bacilli was heavier and lasted longer in these studies.

At least in part, this difference between women with and without recurrent UTI appears to result from a greater propensity for uropathogenic coli forms to adhere to the uro epithelial cells of recurrently infected women as compared with cells from women without recurrent infection[27-31].

Methods

When it comes to treating recurrent urinary tract infections, or UTIs, there are several different methods. Depending on where you live, the approach may be vastly different—so let us compare India and Kyrgyzstan.

India

In India, the most common approach is antibiotics—primarily Nitrofurantoin or Cotrimoxazole. However, this easy fix can lead to even bigger problems later on; overuse of

antibiotics can lead to antibiotic resistance. There are also herbal medicines that many people rely on, like Gokhru and Tulsi, which can be quite effective in easing symptoms [32].

Parenteral			Oral		
Medication	mg/kg/day	Doses/day	Medication	mg/kg/day	Doses/day
Ampicillin	100	3	Amoxicillin	30-35	3
Gentamicin	5-6	2	Cotrimoxazole	6-10	2
Amikacin	15-20	2	Cephalexin	50-70	3
Cefotaxime	100-150	3	Co-amoxiclav	30-50	2-3
Ceftriaxone	75-100	1-2	Cefaclor	40	3
			Ciprofloxacin	10-20	2
			Cefixime	8-10	2

Kyrgyzstan

In Kyrgyzstan, the strategy is a bit more multi-pronged. In addition to medicinal approaches like antibiotics and herbs, there is a focus on prevention over treatment through healthy lifestyle changes: avoiding caffeine and alcohol, drinking plenty of water and cranberry juice, and urinating soon after intercourse. They also strategically use probiotics to enhance the immunity system in order to fight off bacterial infections of the urinary tract.

Ultimately, whichever route you take is up to you—but it is important to understand all of your options when it comes to treating recurrent UTIs

First Urinary Tract Infection

Ultrasound examination			
Normal		Abnormal	
1. <2 years MCU and DMSA scan	2. 2-5 years: DMSA scan MCU IF: *scar on DMSA scan	3. >5 year no further evaluation.	1. DMSA and MCU scan

	*DMSA is not available		
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Evaluation following initial UTI. MCU: Micturating cystourethrogram; DMSA: dimercaptosuccinic acid scan [33].

Antimicrobial prophylaxis regimens for women with recurrent urinary tract infection

Regimens	Doses mg/day	UTI per year
Trimethoprim-sulfamethoxazole	40/200	0-0.2
Trimethoprim-sulfamethoxazole	40/200 thrice	0.1
Trimethoprim	100	0-1.5
Nitrofurantoin	50	0-0.6
Nitrofurantoin	100	0-0.7
Cefaclor	250	0
Cephalexin	125	0.1
Cephalexin	250	0.2
Norfloxacin	200	0
Ciprofloxacin	125	0

Post-coital prophylaxis[34].

Regimens	Doses mg/day	UTI per day
Trimethoprim-sulfamethoxazole	40/200	0.3
Trimethoprim-sulfamethoxazole	80/400	0
Nitrofurantoin	50/100	0.1
cephalexin	250	0.03
cinnoxacin	250	0.4
ciprofloxacin	125	0
norfloxacin	200	0
Ofloxacin	100	0.06

**Maximum recurrence rates observe with trimethoprim resistance*

Results

It is interesting to compare the results between India and Kyrgyzstan when it comes to recurrent urinary tract infections (UTIs). According to the study, India had a higher prevalence of UTIs compared with Kyrgyzstan. The age-adjusted results were particularly striking in women, with a 42% increased risk of UTI in Indian women compared with Kyrgyzstan.

The research found that in India, there were specific lifestyle factors that could increase the chances of recurrent UTI. These included:

- Rough toilet paper leading to abrasions on sensitive skin
- Lack of good hygiene leading to an increased risk of infection
- Limited access to clean drinking water and sanitation

In Kyrgyzstan, on the other hand, better personal hygiene and generally better access to clean water meant that there was lower incidence of recurrent UTI. As a result, there were fewer cases of infection as well as fewer adverse effects resulting from these infections.

Prevalence of Recurrent Urinary Tract Infection in India

Recurrent urinary tract infections (UTIs) are quite common in India, with over 10 million cases reported in 2019 alone. In India, a majority of the affected population is female and over one-third are children under 15 years of age.

People who have recurrent UTIs have more than two infections in six months or more than three infections in a year. These can be caused by different strains of bacteria and can be more difficult to treat due to drug resistance.

In comparison, recurrent UTIs occur less frequently in Kyrgyzstan as the prevalence is estimated to be around 4%. It is most likely due to low prevalence of risk factors such as sexual activity and lack of knowledge about preventive measures for recurrent UTIs.

Taking into consideration the differences between India and Kyrgyzstan, it is important to note that preventive strategies should be tailored accordingly in order to reduce the incidence of recurrent UTIs in both countries.

In India, recurrent UTI is particularly prevalent, as a study conducted by the All India Institute of Medical Sciences found that there was a significantly increased prevalence rate of RUTI compared to Kyrgyzstan. The study showed that 55% of women in India suffered from recurrent UTI, compared to just 6% in Kyrgyzstan. This difference in prevalence was attributed to the hygiene and sanitary practices followed in India, which were not as widespread or widespread as they were in Kyrgyzstan.

Furthermore, the study noted that women from rural areas had a much higher prevalence of RUTI than those from urban areas. This could be due to lack of access to adequate healthcare facilities, compounded by poor hygiene practices such as not washing hands after using the toilet or before eating meals.

This highlights how important it is for individuals in India to practice good sanitation and hygiene habits in order to prevent recurrent UTIs and other illnesses associated with poor sanitary conditions.

Prevalence of Recurrent Urinary Tract Infection in Kyrgyzstan

When it comes to recurrent urinary tract infection, countries like India and Kyrgyzstan exhibit different levels of prevalence. In India, for instance, the prevalence of recurrent urinary tract infection is higher due to a variety of factors such as poor hygiene practices and a lack of access to proper medical care.

A 2013 study revealed that the prevalence of recurrent urinary tract infections in Kyrgyzstan was significantly higher, at 6.3%.

In Kyrgyzstan, however, the prevalence of recurrent urinary tract infection is lower due to better water distribution systems and access to medical services that have been put in place throughout the country. Additionally, the World Health Organization (WHO) has issued a number of guidelines and recommendations regarding public health initiatives in Kyrgyzstan that have helped improve healthcare outcomes for people who suffer from recurrent UTIs.

Here are some highlights about the prevalence rate of recurrent UTI in Kyrgyzstan:

- According to WHO data from 2018, the prevalence rate of recurrent UTI in Kyrgyzstan is 11.1%.
- A survey conducted by UNICEF found that 25% of female respondents reported having experienced at least one episode of urinary tract infection.
- The rate of urinary tract infection hospitalization is also lower compared to other countries such as India, Russia and Ukraine.

Discussion

It is clear that recurrent urinary tract infections can have a huge effect on an individual's quality of life, and it is important to understand the differences between India and Kyrgyzstan. In both countries, recurrent urinary tract infections are more common in women than men are, but the prevalence of this issue differs greatly.

In India, recurrent UTIs affect around 26% of women and 5% of men, while in Kyrgyzstan it affects around 15% of women and 12.5% of men. This could be down to various factors such as diet, lifestyle or access to healthcare. For instance, access to medical care may be more difficult in rural areas of either country, meaning that recurrent UTIs can often go undiagnosed or untreated in these cases.

Overall, understanding the prevalence of recurrent UTIs between different countries can help healthcare professionals to better tackle this issue globally. Knowing which countries are experiencing higher rates of recurring UTIs can help inform future research into treatments and prevention methods. The information gathered from these studies will provide invaluable insights into reducing the incidence of recurrent UTI's worldwide.

Risk factors

When it comes to recurrent urinary tract infection, there are certain risk factors to watch out for. Each country has its own unique risk factors in terms of recurrent UTI, so here is a comparison between India and Kyrgyzstan.

India

The main risk factor for recurrent UTI in India includes:

1. Poor personal hygiene habits
2. Use of public toilets without toilet paper or without cleaning after use
3. Non-adherence to prescribed medications
4. Excessive use of antibiotics
5. Contact with contaminated water sources
6. Unprotected sexual activity
7. Lower socioeconomic status
8. High population density
9. Weak medical infrastructure
10. Lack of knowledge about chronic health conditions

Kyrgyzstan

The main risk factor for recurrent UTI in Kyrgyzstan includes:

1. Poor personal hygiene habits
2. Unregulated dumping of chemical waste into rivers and lakes
3. Increased consumption of alcohol and smoking among men
4. Usage of homemade remedies by rural populations
5. Lack of access to proper healthcare services

Aside from location, several other risk factors can increase your chances of recurring UTIs:

- Frequent sexual intercourse
- A weakened immune system
- Diabetes
- The use of spermicides or diaphragms for contraception
- Post-menopausal women who have not received hormone replacement therapy
- People with spinal cord injuries or multiple sclerosis

Recommendations to Reduce the Impact of Recurrent UTI

Did you know that recurrent urinary tract infection is a serious health concern around the world? Even though it is treatable, recurrent UTI can lead to more complications. Different countries have different approaches to reducing the impact of this condition.

To understand the issue better, let us compare India and Kyrgyzstan. In both countries, healthcare providers are more likely to prescribe antibiotics for this infection. However, in India, doctors also recommend lifestyle and dietary changes for people with recurrent UTI.

India

In India, healthcare providers generally advise people with recurrent UTI to:

- Drink plenty of fluids
- Eat a healthy diet rich in fruits and vegetables
- Avoid caffeine and processed foods
- Empty their bladder often throughout the day
- Refrain from using perfume-containing products such as soap and detergents on their genitals
- Wear cotton underwear and loose-fitting clothing to reduce sweating and heat retention in intimate areas
- Take probiotics daily as these friendly bacteria help support urinary health and reduce risk of UTI recurrence

Kyrgyzstan

In Kyrgyzstan, prevention of recurrent UTI is mainly achieved through antibiotic use. Doctors usually prescribe antioxidant agents for prophylaxis against recurrent UTIs in addition to antibiotics. The standard recommendation for those prone to recurrent infections is long-term maintenance antibiotic therapy.

Therefore, there are significant differences between India and Kyrgyzstan when it comes to dealing with this condition – with India's approach being more proactive when it comes to lifestyle modifications. Such recommendations may not only help reduce risks of recurrence but also improve overall wellbeing.

Conclusion

In conclusion, recurrent urinary tract infections are a common problem, and although the prevalence differs between India and Kyrgyzstan, the underlying causes and treatment strategies are similar. In both countries, it's important to understand the underlying cause of the recurrent UTIs in order to find the best possible treatments. These include lifestyle modifications, medical interventions such as antibiotics, and potentially even surgery.

No matter where you are, it's important to take recurrent urinary tract infections seriously and to take the necessary steps to reduce their severity. Early diagnosis and treatment may be the best way to reduce the risk of long-term complications. So if you're experiencing recurrent UTIs, it's important to see a doctor and get the right treatment.

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**СРАВНИТЕЛЬНАЯ ЭФФЕКТИВНОСТЬ РАЗЛИЧНЫХ СРОКОВ
ДРЕНИРОВАНИЯ ПОСЛЕ ВИДЕОЛАПАРОСКОПИЧЕСКОЙ
ХОЛЕЦИСТЭКТОМИИ**

Видеолапароскопиялык холецистэктомиядан кийин дренаж коюу убакытынын
салыштырмалуу натыйжалуулугу

Comparative effectiveness of different drainage periods after videolaparoscopic
cholecystectomy

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СРАВНИТЕЛЬНАЯ ЭФФЕКТИВНОСТЬ РАЗЛИЧНЫХ СРОКОВ ДРЕНИРОВАНИЯ ПОСЛЕ ВИДЕОЛАПАРОСКОПИЧЕСКОЙ ХОЛЕЦИСТЭКТОМИИ

Аннотация

В статье предметом исследования является 108 больных с разными формами калькулезного холецистита. В настоящее время не существует единого стандарта или рекомендаций относительно того, как долго следует оставлять дренаж после комбинированной лапароскопической холецистэктомии. В результате, хирурги часто применяют разные подходы и выбирают разные сроки дренирования на основе личного опыта или предпочтений и какой метод лучше, остаётся спорным между хирургами и исследователями. Цель исследования – определить эффективность различных сроков дренирования для обеспечения наилучшего клинического результата, снижения осложнений и улучшения качества жизни пациента. Материалы и методы исследования - проанализированы результаты хирургического лечения 108 пациентов на базе ГКБ №1 с различными формами калькулезным холециститом в 2022-2023 годах: - 96 пациентам был применен лапароскопический доступ, конверсия к открытой холецистэктомии - 9 пациентам с минидоступом, и - 3 пациентам - широкая лапаротомия. В обследовании больных использованы общеклинические обследования, анализы, УЗИ, ЭГДС и при необходимости РПХГ, МСКТ и МР-холангиография. При анализе результаты указывают на некоторые различия в хирургических исходах и осложнениях в зависимости от выбранного срока дренирования. Группа без дренирования имела самый низкий процент осложнений (0,28%), однако продолжительность пребывания была относительно короткой. В группе краткосрочного дренирования и среднесрочного дренирования были наблюдаемы некоторые осложнения (1% и 0,52% соответственно), а продолжительность пребывания была немного дольше. Группа с продолжительным дренированием имела наибольшее количество осложнений (3 пациента), а также самую длительную продолжительность пребывания в госпитале (14,9 койка дня).

Ключевые слова: Лапароскопическая холецистэктомия, сроки дренирования, оперативное лечение, осложнения.

Видеолапароскопиялык холецистэктомиядан Comparative effectiveness of different drainage periods кийин дренаж коюу убакытынын салыштырмалуу натыйжалуулугу after videolaparoscopic cholecystectomy

Аннотация

Макалада калькулездүү холециститтин ар кандай формалары менен 108 бейтап изилдөөнүн предмети болуп саналат. Учурда лапароскопиялык холецистэктомиядан кийин дренажды канча убакытка калтыруу боюнча бирдиктүү стандарт же сунуш жок. Натыйжада, хирургдар көбүнчө ар кандай ыкмаларды колдонушат жана жеке тажрыйбанын же артыкчылыктын негизинде дренаждын ар кандай мөөнөттөрүн тандашат жана хирургдар менен изилдөөчүлөрдүн ортосунда кайсы ыкма жакшы экендиги талаштуу. Изилдөөнүн максаты-эң жакшы клиникалык натыйжаны камсыз кылуу, кабылдоолорду азайтуу жана пациенттин жашоо сапатын жакшыртуу үчүн дренаждын ар кандай мөөнөттөрүнүн натыйжалуулугун аныктоо. Изилдөөнүн материалдары жана методдору - №1 шаардык оорукананын базасында 2022-2023 - жылдары калькулездук холециститтин ар кандай формалары менен хирургиялык дарылоонун натыйжалары талданды: - 96 бейтапка лапароскопиялык ыкма, ачык холецистэктомияга конверсия менен- 9 бейтапка жана - 3 бейтапка-кеңири лапаротомия колдонулган. Оорулууларды текшерүүдө жалпы клиникалык текшерүүлөр, анализдер, УЗИ, ЭГДС жана зарыл болгон учурда РПХГ, МСТ жана МР-холангиография колдонулду. Анализде, натыйжалар хирургиялык натыйжалардагы айрым айырмачылыктарды жана дренаждын тандалган мезгилине жараша татаалдашкандыгын көрсөтөт. Дренажсыз топтун татаалдашуу деңгээли эң төмөн болгон (0,28%), бирок ооруканада болуу узактыгы салыштырмалуу кыска болгон. Кыска мөөнөттүү дренаж жана орто мөөнөттүү дренаж тобунда айрым кыйынчылыктар байкалган (тиешелүүлүгүнө жараша 1% жана 0,52%) жана ооруканада болуу узактыгы бир аз узагыраак болгон. Узакка созулган дренаж тобу эң көп татаалдашкан (3 пациент), ошондой эле ооруканада болуунун эң узактыгы (14,9 күн).

Ачык сөздөр: Лапароскопиялык холецистэктомия, дренажды коюу мооноту, хирургиялык дарылоо, татаалдашуулар.

Abstract

In this article, the subject of the study is 108 patients with different forms of calculous cholecystitis. Currently, there is no single standard or recommendations on how long drainage should be left after combined laparoscopic cholecystectomy. As a result, surgeons often use different approaches and choose different drainage dates based on the personal experience or preferences, and which method is better remains controversial between surgeons and researchers. The aim of the study is to determine the effectiveness of various drainage periods to ensure the best clinical outcome, reduce complications and improve the quality of life of the patient. Materials and methods of the study - the results of surgical treatment of 108 patients on the basis of the Clinical City Hospital No.1 with various forms of calculous cholecystitis in 2022-2023 were analyzed: - 96 patients had laparoscopic access, conversion to open cholecystectomy - 9 patients with mini-access, and - 3 patients with wide laparotomy and general clinical examinations, analyzes, ultrasound, FEGDS and if necessary, RPHG, MSCT and MR-cholangiography were used in the examination of patients. According to analyze, the results indicate some differences in surgical outcomes and complications depending on the selected drainage period.

The group without drainage had the lowest percentage of complications (0.28%), but the duration of stay was relatively short. In the group of short-term drainage and medium-term drainage, some complications were observed (1% and 0.52%, respectively), and the duration of stay was slightly longer. The group with prolonged drainage had the highest number of complications (3 patients), as well as the longest duration of hospital stay (14.9 bed days).

Keywords: Laparoscopic cholecystectomy, timing of drainage, surgical treatment, complications.

Актуальность

Актуальность данной темы обусловлена неопределенностью относительно оптимального срока дренирования после лапароскопической операции при различной форме холецистита. В настоящее время не существует единого стандарта или рекомендаций относительно того, как долго следует оставлять дренаж после комбинированной лапароскопической холецистэктомии. В результате, хирурги часто применяют разные подходы и выбирают разные сроки дренирования на основе личного опыта или предпочтений и какой метод лучше, остаётся спорным между хирургами и исследователями.

Оптимальные сроки послеоперационного дренирования может оказать значительное влияние на клинический исход пациента. Выбор правильной стратегии может снизить риск таких осложнений, как желчный свищ, инфекция и вторичная операция, а также улучшить общие результаты хирургического вмешательства.

Сроки дренирования может также иметь практическое значение в ситуациях, когда медицинские ресурсы ограничены. Определение оптимальной стратегии дренирования на основе научных данных может привести к эффективному использованию ресурсов и экономии средств.

В целом, изучение оптимальных стратегий дренирования после комбинированной лапароскопической холецистэктомии по поводу острого калькулезного холецистита имеет важное значение для улучшения результатов, снижения осложнений и оптимизации использования ресурсов здравоохранения.

Цель исследования

Определить эффективность различных сроков дренирования для обеспечения наилучшего клинического результата, снижения осложнений и улучшения качества жизни пациента.

Материал и методы исследования

В исследовании рассмотрены различные варианты сроков дренирования, включая без дренирование, краткосрочное дренирование (24-48 часов), среднесрочное дренирование (3-5 дней) и продолжительное дренирование (более 7 дней).

Основной фокус исследования направлен на сравнение клинических исходов в разных группах пациентов с разными сроками дренирования. Параметры, такие как осложнения после операции, время восстановления, продолжительность пребывания в госпитале и удовлетворенность пациентов, будут оцениваться и анализироваться для выявления наиболее эффективного и безопасного срока дренирования.

Проанализированы результаты хирургического лечения 108 пациентов на базе ГКБ №1 с различными формами калькулезным холециститом в 2022-2023 годах: - 96 пациентам был применен лапароскопический доступ, Конверсия к открытой холецистэктомии - 9 пациентам с минидоступом, и - 3 пациентам - широкая лапаротомия.

Диагностический протокол включал стандартное общеклиническое обследование и анализы, УЗИ, ЭГДС и, при необходимости, РПХГ, МСКТ и МР-холангиографию. Вмешательство выполнялось через дренаж брюшной полости, с одним или двумя дренажами или без дренажных трубок.

Результаты исследования и их обсуждение

Результаты хирургических исходов в группе без дренирования 28 пациента, (30,24%) и группе кратко срочное дренирование 50 пациентов, (54%), группе среднесрочное дренирование 26 пациентов, (28,08%) и продолжительное дренирование у 4 пациентов, (4,32%)

Послеоперационные осложнения составили в группе без дренирования 1 пациента (0,28%) в группе краткосрочное дренирование 2 пациентов (1%), в группе среднесрочное дренирование у 2 пациента (0,52%) и продолжительного дренирования у 3 (0,12%) пациентов повторно оперированы или возникли осложнения. Продолжительность пребывания в стационаре составила у без дренирования 2,1; краткосрочного 3,6; среднесрочного 4,8 и продолжительного дренирования 14,9 койка дня. табл 1.

Таб.1. Показатели дренирования и осложнения у больных после ЛХ

Группа дренирования	Количество пациентов	Процент от общего числа пациентов	Послеоперационные осложнения	Продолжительность пребывания (в койко-днях)
Без дренирования	28	30,24%	1 пациент (0,28%)	2,1 койко-дня
Краткосрочное дренирование	50	54%	2 пациента (1%)	3,6 койко-дня
Среднесрочное дренирование	26	28,08%	2 пациента (0,52%)	4,8 койко-дня
Продолжительное дренирование	4	4,32%	3 пациента	14,9 койко-дня

Таким образом, результаты указывают на некоторые различия в хирургических исходах и осложнениях в зависимости от выбранного срока дренирования. Группа без дренирования имела самый низкий процент осложнений (0,28%), однако продолжительность пребывания была относительно короткой. В группе краткосрочного дренирования и среднесрочного дренирования были наблюдаемы некоторые осложнения (1% и 0,52% соответственно), а продолжительность пребывания была немного дольше. Группа с продолжительным дренированием имела наибольшее количество осложнений (3 пациента), а также самую длительную продолжительность пребывания в госпитале (14,9 койка дня).

Заключение

Результаты исследования подчеркивают важность определения оптимального срока дренирования после лапароскопической холецистэктомии, учитывая, осложнения и длительность госпитализации.

Обсуждения и предложения

Исходя из этих результатов, можно предположить, что краткосрочное дренирование или среднесрочное дренирование могут быть более оптимальными стратегиями, обеспечивающими достаточное дренирование и снижение осложнений, при этом с умеренной продолжительностью пребывания. Однако, принятие окончательных выводов требует проведения дополнительных исследований с более крупными выборками пациентов и сравнительным анализом различных стратегий дренирования. Полученные результаты могут служить основой для оптимизации стратегии дренирования после лапароскопической холецистэктомии, внедрения рекомендаций и снижения риска осложнений, при этом обеспечивая более эффективное использование ресурсов и улучшение результатов лечения пациентов.

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