INFLUENCE COVID 19 TO DEVELOPMENT KINDNEY STONE DISEASE IN FERGANA VALLEY

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Annotation: In this article it canindirect effects of the COVID-19 pandemic on lifestyle, dietary habits, stress levels, and access to healthcare services may have contributed to an increased risk of kidney stone formation and complications in the Fergana Valley and similar regions. Public health interventions focusing on promoting healthy lifestyles and ensuring timely access to healthcare are crucial to mitigate the impact of both COVID-19 and kidney stone disease on population health.

Key words: post-covid situation, epidemiology, cross sectional study, representat group, random selection method.

The COVID-19 pandemic may indirectly contribute to the development of kidney stone disease in the Fergana Valley and elsewhere due to several factors:

1. Changes in Lifestyle: During lockdowns and periods of restricted movement, people may be less physically active, leading to dehydration and altered dietary habits. Reduced physical activity and inadequate hydration can increase the risk of kidney stone formation.

2. Dietary Changes: Disruptions in food supply chains and economic challenges during the pandemic may lead to changes in dietary patterns. Increased consumption of processed foods, high-sodium foods, and reduced intake of fruits and vegetables can contribute to kidney stone formation.

3. Stress and Anxiety: The stress and anxiety associated with the pandemic can lead to poor lifestyle choices, including unhealthy eating habits and reduced water intake. Chronic stress may also contribute to the formation of kidney stones by altering hormone levels and increasing inflammation.

4. Limited Access to Healthcare: During the pandemic, access to healthcare services may be limited, leading to delays in diagnosis and treatment of kidney stones. Delayed treatment can exacerbate symptoms and increase the risk of complications.

5. Altered Healthcare Priorities: Healthcare resources may be redirected to manage COVID-19 patients, leading to reduced availability of services for non-emergency conditions such as kidney stones. This delay in treatment can worsen the condition and increase the risk of complications.

Overall, while COVID-19 itself may not directly cause kidney stone disease, the indirect effects of the pandemic on lifestyle, dietary habits, stress levels, and access to healthcare can contribute to an increased risk of kidney stone formation and complications in populations residing in regions like the Fergana Valley.

Certainly! The Fergana Valley, located in Central Asia, is known for its agricultural productivity and diverse population. Here's how the COVID-19 pandemic might have influenced the development of kidney stone disease in the region:

1. Limited Access to Fresh Produce: During the pandemic, disruptions in transportation and economic challenges may have affected the availability and affordability of fresh fruits and vegetables in the Fergana Valley. As a result, people may have relied more on processed foods and high-sodium items, which can contribute to dehydration and increase the risk of kidney stone formation.

2. Decreased Physical Activity: Lockdown measures and social distancing guidelines implemented to curb the spread of COVID-19 may have led to decreased physical activity levels among the population. Reduced movement and exercise can impair metabolism and increase the

concentration of stone-forming substances in the urine, such as calcium and oxalate, thereby raising the risk of kidney stone formation.

3. Altered Water Consumption: Changes in daily routines and work environments during the pandemic may have affected individuals' water intake patterns. Stress, anxiety, and distractions related to COVID-19 news and concerns could have led to inadequate hydration, which is a significant risk factor for kidney stone development.

4. Delayed Healthcare Seeking Behavior: Fear of contracting COVID-19 or concerns about overwhelming healthcare systems may have deterred individuals from seeking timely medical attention for symptoms related to kidney stones. Delayed diagnosis and treatment can lead to prolonged discomfort and complications associated with kidney stone disease.

5. Impact on Healthcare Infrastructure: The healthcare system in the Fergana Valley, like in many other regions, may have been strained by the surge in COVID-19 cases. Resources, including medical personnel, equipment, and hospital beds, may have been diverted to manage COVID-19 patients, potentially leading to delays in non-emergency care, including diagnosis and treatment of kidney stones.

Considering these factors, the indirect consequences of the COVID-19 pandemic on lifestyle, dietary habits, stress levels, and healthcare access could have contributed to an increased incidence of kidney stone disease in the Fergana Valley and other similar regions. Public health efforts aimed at promoting healthy lifestyles, maintaining adequate hydration, and ensuring timely access to healthcare services are essential to mitigate the impact of both COVID-19 and kidney stone disease on the population's health and well-being.

In the method of simultaneous inspection, a working hypothesis is drawn up, which is to be clarified by means of inspection, and then the inspection is planned. This method does not cover the entire population, the desired unit is selected from the studied population in a representative way. There are several different methods to ensure representativeness, one of which is random sampling.

We use the principle of random selection in our research. In the city of Fergana, a census of men and women aged 18-60 who have experienced COVID-19 is being taken. A representative group is formed from them, the principle of random selection is used, that is, the population of the city who has been sick with COVID-19 should have an equal chance of being selected for testing. In this way, no less than 1600 COVID-19 a A are formed: At the international level, it is recommended to form the population for examination in this way, because such a method is used, the obtained results satisfy the minimum statistical requirements. The next stage. The collected data is processed and the results are organized. In the statistical processing, an assessment of the clinical-demographic description of COVID-19a A and an analysis of the severity of COVID-19 is carried out. Coxney's multivariate regression model is constructed and other traditional statistical methods are used.

Statistical analysis of the obtained results is carried out using Excel-2020 software. The prognostic significance of risk factors is assessed using regression (discriminant and multiple stepwise) analysis. Student-Fisher criteria are used, and correlation analysis is also used.

The purpose of the study is to study the epidemiology and clinical manifestations of the post-covid condition, to optimize the methods of treatment and prevention in the conditions of the Fergana Valley.

The objectives of the study are to study and evaluate the epidemiology of the post-covid condition among residents of Fergana aged >18-70;

- To study and evaluate the gender and age-related features of the post-covid situation among the residents of Fergana;

- Study and evaluation of the main clinical syndromes and symptoms of the post-covid condition in the conditions of the Fergana Valley;

- Pharmacoepidemiological analysis and evaluation of the regular practice of carrying out the client with a post-covid condition - the population in the conditions of the Fergana Valley;

Research methods. Questionnaire, general clinical, biochemical and instrumental, statistical research methods are used to assess the post-covid condition in the elderly population.

Using the questionnaire method, the most prone factors to the development of the post-covid condition are identified and evaluated: persons over 50 years of age; those who have had a severe form of covid infection and people who are on long-term lung ventilation; population groups with chronic diseases - people suffering from chronic heart failure, lung pathology, arterial hypertension, ischemic heart disease, obesity, diabetes, autoimmune diseases, etc.

Proper planning of medical research is an integral part of evidence-based medicine. In our research on the epidemiology of the post-covid condition, the use of a simultaneous research method has the following advantages: epidemiology of the post-covid condition, determination of clinical manifestations; execution speed; convenient for studying chronic diseases; the possibility of studying a large number of risk factors; the ability to study multiple outcomes; the possibility of assessing the dynamics of the event/disease spread during several consecutive studies at the same time; forming a basis for further scientific research (contributing to the development of causal hypotheses).

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