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Research on the Treatment and Nursing of Kidney Stones

Lijuan Duan*

School of Public Health, North China University of Science and Technology, Tangshan 063200, China
**Author to whom correspondence should be addressed.*

Abstract: ***With the improvement of medical technology and the increasing emphasis on health, research on kidney stones has become more comprehensive. As a common urinary system disease, kidney stones have obtained mature treatment plans in the development of medical technology, playing an important role in ensuring people's healthy lives. This article explores the causes of kidney stones, and provides a more comprehensive explanation of their classification and clinical manifestations. Through a comprehensive understanding of kidney stone diseases, different treatment and nursing plans are proposed for the treatment and care of kidney stones based on their different types and clinical manifestations, in order to better promote the treatment of kidney stones and ensure the physical health of patients. By studying the treatment and nursing of kidney stones, we aim to provide reference and guidance for the treatment of kidney stone diseases.***

Keywords: Renal calculus; Treatment; Nursing.

1. Introduction

The kidneys are an important component of human organs and have significant importance for human health. With the development of modern medical technology and changes in lifestyle, the types and treatments of kidney diseases have become more scientific. The most common disease in kidney disease is kidney stones. According to research, kidney stones have become one of the harmful diseases that threaten human life and health. They generally occur in young adults, and for women, the main source of stones is mainly in the kidneys. In order to overcome the threat of kidney stones to human health, the treatment of kidney stones is currently more precise and refined. To ensure the life and health of patients, treatment and care are taken into account, providing double insurance for their recovery and overcoming the threat of kidney stones. Kidney stones are generally treated with traditional open surgery and minimally invasive surgery. Kidney stone surgery is a treatment method used for patients with kidney stones that cannot be broken by traditional stone breaking surgery, or for patients with kidney problems that cannot accept stone breaking treatment, as well as for some patients with large kidney stones.

2. Causes of Kidney Stones

The formation of kidney stones is closely related to people's lifestyle habits, as well as their age, genes, occupation, family background, and living environment. The formation of kidney stones is mainly attributed to two aspects. The first is an increase in the content of solid substances in urine caused by certain factors. The second is a decrease in the solubility of solid substances in urine, which leads to the

formation of kidney stones from two reasons. The root cause is mainly manifested in abnormal collective functional metabolism, lack of exercise, unreasonable diet, urinary tract obstruction, urinary tract infection and other reasons that lead to the formation of stones. The composition of kidney stones also varies depending on the composition of the stones. Generally speaking, there is rarely a single crystal composition, but mostly two or more, with one as the main component. There are various causes of kidney stones, and the above are only the ones mentioned in current research. Further research is needed on the formation and treatment of kidney stones, in order to have a more comprehensive and scientific understanding of kidney stones.

3. Types and Clinical Manifestations of Kidney Stones

3.1 Types of Kidney Stones

Kidney stones, as a common disease of the urinary system, are defined differently in clinical practice based on the different causes of stone formation. Calcium oxalate stones are the most common, accounting for 71% to 84%. Urine is acidic, characterized by a hard, non fragile, rough, irregular, brownish color, and is prone to tissue damage causing hematuria. Therefore, for calcium oxalate stones, early detection and treatment should be carried out to avoid further causes. Other stones should also adhere to the principle of early detection and treatment, avoiding the deterioration of stones caused by procrastination not only increases the difficulty of later treatment, but also increases the cost burden on patients.

3.2 Clinical Manifestations of Kidney Stones

The clinical manifestations of kidney stones are related to the size, location, and presence of infection of the stones. Clinical studies have found that patients with kidney stones generally do not have symptoms unless the location of the stones changes, such as displacement of the kidney or obstruction of the urethra. If urinary tract infections are present, symptoms such as chills and fever may also occur. Acute renal colic often causes unbearable pain in patients, and the most common clinical symptoms include nausea, vomiting, abdominal distension, and hematuria. Due to differences in the location and causes of kidney stones, there are also certain differences in clinical manifestations.

4. Treatment and Nursing of Kidney Stones

4.1 Treatment of Kidney Stones

The treatment of kidney stones should adhere to symptomatic treatment, and different treatment plans can be adopted according to the different types of kidney stones. Currently, there are multiple main treatment methods for kidney stones, including ureteroscopic lithotripsy, percutaneous nephrolithotomy, laparotomy, and immediate treatment of renal colic and infection. The specific treatment plan should be determined based on the location and size of the patient's stones, as well as the impact of the stones on the patient. Reliable treatment methods should be adopted in a timely manner to alleviate the patient's pain. If there is an infection of stones, antibiotics should be used in a timely manner to control the infection and reduce the difficulty of later treatment. If necessary, renal puncture drainage can be performed. If the patient has renal colic, anticholinergic, progesterone, and calcium channel blocking drugs can be used. If necessary, injection of pethidine can be used for pain relief. Patients with bilateral ureteral stones and obstructive anuria may consider immediate surgical removal of the stones. Different causes or types of stones should be treated according to different

treatment methods to achieve the best therapeutic effect and ensure the patient's recovery.

4.2 Postoperative Care for Kidney Stones

In the postoperative recovery treatment of kidney stones, targeted recovery plans should be developed based on the patient's specific physical condition to achieve better recovery results. The care of kidney stones should follow the doctor's instructions and start with diet and daily habits according to the precautions during treatment, in order to reduce the harm caused by stones. Develop regular lifestyle and dietary habits, and control dietary structure. Ensure sufficient water intake. Exercise appropriately and strengthen aerobic exercise. Although regular exercise is necessary for postoperative recovery of kidney stones, the type of exercise should be selected according to the actual condition of the body to avoid negative effects on postoperative recovery caused by excessive exercise.

5. Conclusion

With the improvement of stone treatment technology, the treatment technology for kidney stones has become more mature and can ensure people's health. The nursing plan also provides protection for the postoperative treatment of kidney stones. Different treatment measures are taken according to the different types of kidney stones, achieving targeted treatment methods and better ensuring the elimination of stones. Surgical treatment is generally used for the treatment of stones, so postoperative care is also crucial. For the treatment of stones, not only should treatment be done well, but also care should be taken to achieve better treatment results and ensure rapid recovery of patients. However, currently there are still a large number of kidney stone patients in China. By studying the fundamental causes of stone formation, we can guide people to prevent the occurrence of kidney stone diseases, reduce the pain caused by stones, and form prevention and guidance manuals to provide theoretical support for reducing stone patients.

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