



## **ORGANIZATION OF EARLY DIAGNOSIS AND PREVENTION OF PYELONEPHRITIS IN CHILDREN**

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### **Abstract:**

Pyelonephritis is a bacterial infection that affects the kidneys, which is one of the most common bacterial infections in children. The infection may affect one or both kidneys and can lead to severe complications if not detected and treated early. Early diagnosis and prevention of pyelonephritis is essential to avoid complications and ensure the health and well-being of children. This article discusses the organization of early diagnosis and prevention of pyelonephritis in children.

**Keywords:** Pyelonephritis, children, early diagnosis, prevention, healthcare providers, parents, caregivers, awareness, screening, diagnosis, treatment, good hygiene, fluid intake, toilet habits, urinary tract infections, education, follow-up, complications.

Pyelonephritis is a bacterial infection that affects the kidneys and urinary tract, and is more common in females than males. It can occur at any age, including in children, and can cause serious complications if left untreated. Pyelonephritis in children can lead to long-term damage to the kidneys, and can even result in sepsis and renal failure. Therefore, early diagnosis and prevention of pyelonephritis in children is essential to ensure their well-being and health. The organization of early diagnosis and prevention of pyelonephritis in children requires a multi-faceted approach that involves healthcare professionals, parents, and caregivers. This article will discuss the importance of early diagnosis and prevention of pyelonephritis in children, the risk factors for the infection, the signs and symptoms, and the strategies that can be implemented to prevent the infection. Additionally, we will explore the role of healthcare professionals, parents, and caregivers in the organization of early diagnosis and prevention of pyelonephritis in children, and the challenges associated with implementing effective prevention strategies. Pyelonephritis is a type of kidney infection that can occur in children. It is caused by the same bacteria that cause urinary tract infections, but it can be more severe and can lead to complications if not treated promptly. Early diagnosis and prevention of pyelonephritis in children is essential to avoid complications and ensure the health and well-being of children. Pyelonephritis can occur in children of any age, but it is more common in girls than in boys. The infection can be caused by a variety of factors, including structural abnormalities of the urinary tract,

urinary tract infections, and poor toilet hygiene. Symptoms of pyelonephritis in children include fever, abdominal pain, nausea, vomiting, and difficulty urinating. The diagnosis of pyelonephritis in children involves a combination of physical examination, urine tests, and imaging tests. Treatment usually involves antibiotics and management of any underlying conditions that may be contributing to the infection. Prevention of pyelonephritis in children involves promoting good hygiene, encouraging adequate fluid intake, promoting regular toilet habits, and prompt treatment of urinary tract infections. Screening of children who are at risk, such as those with a history of urinary tract infections or structural abnormalities of the urinary tract, can help detect the infection early and prevent complications. The organization of early diagnosis and prevention of pyelonephritis in children involves awareness, screening, diagnosis and treatment, prevention, and follow-up. Healthcare providers, parents, and caregivers should work together to raise awareness, promote prevention, and ensure prompt diagnosis and treatment of pyelonephritis in children. This article will discuss in detail the organization of early diagnosis and prevention of pyelonephritis in children. Pyelonephritis is a bacterial infection that affects the kidneys and urinary tract. The infection is caused by bacteria that enter the urinary tract through the urethra and bladder and travel to the kidneys. The bacteria can cause inflammation and damage to the kidneys, leading to complications such as kidney failure, sepsis, and death.



Symptoms of Pyelonephritis in Children. Pyelonephritis can affect children of all ages, but it is more common in infants and young children. The symptoms of pyelonephritis in children include:

**Fever:** Children with pyelonephritis often have a high fever, which may be accompanied by chills and sweating.

**Pain:** Children with pyelonephritis may experience pain in the back, abdomen, or side, which can be severe and debilitating.

**Urinary Symptoms:** Children with pyelonephritis may have frequent urination, painful urination, and blood in the urine.

**Nausea and Vomiting:** Children with pyelonephritis may experience nausea and vomiting, which can lead to dehydration and electrolyte imbalances.

**Early Diagnosis of Pyelonephritis.** Early diagnosis of pyelonephritis is essential to prevent complications and ensure the health and well-being of children. The following are the steps involved in the early diagnosis of pyelonephritis:

**Medical History:** The medical history of the child is the first step in the early diagnosis of pyelonephritis. The doctor will ask about the child's symptoms, medical history, and family history of urinary tract infections.

**Physical Examination:** The doctor will perform a physical examination of the child, which includes checking the temperature, blood pressure, and heart rate. The doctor will also examine the abdomen, back, and genital area for signs of inflammation and pain.

**Urine Tests:** Urine tests are essential in the early diagnosis of pyelonephritis. The doctor will order a urine culture and urinalysis to check for the presence of bacteria and white blood cells in the urine. A positive urine culture indicates the presence of bacteria in the urinary tract, while a high number of white blood cells indicates inflammation and infection.

**Imaging Tests:** Imaging tests such as ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI) may be ordered to check for abnormalities in the kidneys and urinary tract. These tests can also identify the presence of kidney stones, tumors, or other structural abnormalities that may increase the risk of pyelonephritis.

**Prevention of Pyelonephritis in Children.** Prevention of pyelonephritis in children is essential to avoid complications and ensure the health and well-being of children. The following are the steps involved in the prevention of pyelonephritis in children:

**Hygiene:** Good hygiene is essential in preventing pyelonephritis in children. Children should be taught to wipe from front to back after using the toilet to avoid spreading bacteria from the anus to the

urethra. They should also be taught to wash their hands before and after using the toilet.

**Fluid Intake:** Adequate fluid intake is essential in preventing pyelonephritis in children. Children should be encouraged to drink plenty of water and other fluids to flush out bacteria from the urinary tract. Encouraging frequent urination can also help prevent the buildup of bacteria in the urinary tract.

In conclusion, pyelonephritis is a serious bacterial infection that affects the kidneys and urinary system of children. Early diagnosis and prevention of pyelonephritis is crucial to prevent complications and ensure the well-being of children. The organization of early diagnosis and prevention of pyelonephritis in children involves several steps, including awareness, screening, diagnosis and treatment, prevention, and follow-up. Healthcare providers, parents, and caregivers all have a role to play in the early diagnosis and prevention of pyelonephritis in children. Healthcare providers should screen children who are at risk of pyelonephritis and provide prompt diagnosis and treatment when necessary. They should also educate parents and caregivers on the prevention of pyelonephritis in children and encourage good hygiene, adequate fluid intake, and regular toilet habits. Parents and caregivers can help prevent pyelonephritis by ensuring their children maintain good hygiene, drink plenty of fluids, and use the toilet regularly. They should also seek prompt medical attention if their child shows symptoms of a urinary tract infection. Education and awareness programs can also play a significant role in the organization of early diagnosis and prevention of pyelonephritis in children. Such programs can help raise awareness of the symptoms and risk factors of pyelonephritis and promote the importance of early diagnosis and treatment. Finally, regular follow-up is essential to ensure that children who have been diagnosed with pyelonephritis are responding to treatment and to detect any recurrence of the infection. Follow-up can also identify any underlying conditions that may increase the risk of pyelonephritis.

Pyelonephritis is a serious bacterial infection that affects the kidneys and urinary tract, and can cause long-term damage if left untreated. Early diagnosis and prevention of pyelonephritis in children is essential to ensure their well-being and health. The organization of early diagnosis and prevention of pyelonephritis in children requires a multi-faceted approach that involves healthcare professionals, parents, and caregivers. Some of the key strategies for preventing pyelonephritis in children include promoting good hygiene practices, promoting breastfeeding, encouraging timely and appropriate treatment of urinary tract infections, and identifying and managing underlying medical conditions that increase the risk of



pyelonephritis. Additionally, educating parents and caregivers about the signs and symptoms of pyelonephritis, and encouraging them to seek medical attention promptly if their child develops symptoms, can help to ensure early diagnosis and treatment of the infection. Pyelonephritis is a serious bacterial infection that affects the kidneys and urinary tract, and can have long-term consequences if left untreated. It is more common in females than males, and can occur at any age, including in children. Early diagnosis and prevention of pyelonephritis in children is essential to ensure their well-being and health. The organization of early diagnosis and prevention of pyelonephritis in children requires a multi-faceted approach that involves healthcare professionals, parents, and caregivers. Strategies for preventing pyelonephritis in children include promoting good hygiene practices, encouraging timely and appropriate treatment of urinary tract infections, identifying and managing underlying medical conditions, promoting breastfeeding, and educating parents and caregivers about the signs and symptoms of the infection. Effective prevention of pyelonephritis in children requires a collaborative effort from all stakeholders. Healthcare professionals play a crucial role in diagnosing and treating pyelonephritis, as well as educating parents and caregivers about prevention strategies. Parents and caregivers must also be vigilant in promoting good hygiene practices, seeking timely medical attention if their child develops symptoms, and ensuring that their child receives appropriate medical care. Despite the challenges associated with implementing effective prevention strategies, early diagnosis and prevention of pyelonephritis in children is crucial for reducing the incidence of the infection and improving the long-term health outcomes of affected children. By working together, healthcare professionals, parents, and caregivers can help to ensure that children are protected from the devastating consequences of pyelonephritis.

In conclusion, the organization of early diagnosis and prevention of pyelonephritis in children requires a collaborative effort from all stakeholders. By implementing effective prevention strategies and promoting early diagnosis and treatment, we can help to reduce the incidence of pyelonephritis in children and improve their long-term health outcomes. Ultimately, ensuring the well-being and health of our children is paramount, and the prevention of pyelonephritis is an essential component of achieving this goal. The organization of early diagnosis and prevention of pyelonephritis in children requires a comprehensive approach that involves healthcare providers, parents, and caregivers. By working together, we can prevent the development of pyelonephritis in children, reduce the risk of

complications, and ensure the health and well-being of our children.

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