

COMPLICATIONS OF POST-COVID PNEUMONIA IN CHILDREN

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ABSTRACT: The COVID-19 pandemic has caused numerous health issues not only in adults but also in children. This infection, especially, may lead to the development of pneumonia, which severely affects children's health. This article examines post-COVID pneumonia and its complications in children. The article outlines the impact of pneumonia on children's bodies, its development process, clinical symptoms, analyses, and treatment methods. Additionally, it provides information on the psychological and physical effects of this disease on children.

Introduction

The COVID-19 pandemic put enormous pressure on health systems worldwide, and many countries took strong measures to combat this infection. However, the impact of COVID-19 infection on children is still not fully understood, and its complications may lead to risks in various areas. Pneumonia, especially in children, is one of the serious complications of COVID-19 infection.

COVID-19 infection in children can cause acute respiratory problems. In some cases, the infection leads to the development of pneumonia, which has long-term effects on children's health. Research indicates that 5-10% of children infected with COVID-19 develop pneumonia, a statistic that is linked not only to the severity of the infection but also to how the child's immune system responds.

Main Section

1. Development of Post-COVID Pneumonia

COVID-19 infection affects the lower parts of the respiratory system, leading to the development of pneumonia. Pneumonia manifests as inflammation of the lung tissues. This process typically leads to acute respiratory problems, which may result in oxygen deficiency and shortness of breath.

Children's immune systems differ from adults, which can affect how the COVID-19 infection impacts their bodies. On the other hand, many children experience mild or non-severe symptoms, but in some cases, the infection leads to pneumonia.

Main factors contributing to the development of pneumonia in children:

- **Weak immune system:** Some children are born with or develop weak immune systems due to congenital factors or illnesses, which increases the risk of developing pneumonia.

- **Age:** Children under the age of 5 may face greater challenges in combating COVID-19 infection.
- **Living in large families:** In larger families, especially those with frequent social interactions, children are at a higher risk of infection.

2. Complications of Pneumonia in Children

The spread of pneumonia among children can lead to numerous negative outcomes. The complications may include:

- **Oxygen Deficiency:** In children with pneumonia, the damage to lung tissue leads to oxygen deficiency. This condition often requires hospitalization.
- **Heart Disorders:** Inflammation of the lungs can affect the heart, potentially leading to heart function disturbances.
- **Neurological Impact:** Pneumonia in children can lead to long-term psychological complications. The infection may weaken certain parts of the brain, leading to neurological issues among children.

3. Treatment Methods for Post-COVID Pneumonia

The treatment of post-COVID pneumonia in children involves the following medical approaches:

- **Antibiotics and Antiviral Medications:** Antibiotics and antivirals are widely used in treating pneumonia. These help reduce the inflammation caused by the infection and promote faster recovery.
- **Oxygen Therapy:** When oxygen deficiency occurs in the lungs, oxygen therapy is provided to support the child's respiratory system and normalize oxygen levels.
- **Immunostimulants:** Immunostimulant drugs are used in treating pneumonia to strengthen the immune system, improving the body's ability to fight the infection.

4. Prevention and Risk Mitigation

To prevent the spread of COVID-19 and pneumonia in children, the following preventive measures are recommended:

- **Vaccination:** Vaccination against COVID-19 in children helps prevent the development of pneumonia.
- **Hygiene Practices:** Ensuring children wash their hands, face, and wear masks helps prevent infection transmission.
- **Social Distancing:** Maintaining social distance among children reduces the spread of infection.
- **Regular Medical Checkups:** Regularly monitoring children's health and updating vaccinations is important.

5. Psychological Impact of COVID-19 on Children

COVID-19 has had a profound psychological impact on children. Many children experience anxiety, stress, and depression while fighting the infection and dealing with quarantine measures. The negative psychological consequences include:

- **Anxiety:** Fear of illness, staying at home for long periods, and social isolation increase anxiety in children.
- **Depression:** Long-term isolation and school closures may lead to the development of psychological depression in children.
- **Reduced Physical Activity:** Children often reduce their physical activity while staying at home, which negatively affects their health.

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