Questionnaire Survey on Adherence to Inhaled Corticosteroids and Asthma Control in Outpatient Children with Asthma

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Abstract

Objective: To explore the adherence to inhaled corticosteroids (ICS) therapy and asthma control in outpatient children with asthma, and to analyze the relationship between the two groups, as well as the influencing factors of medication adherence.

Methods: A convenience sample of 147 outpatient children aged 3-18 years diagnosed with asthma was selected. The 8-item Morisky Medication Adherence Scale (MMAS-8) was used to assess the adherence to ICS therapy, and the Asthma Control Test (ACT) was used to evaluate asthma control. The patients were divided into two groups based on the medication adherence of ICS therapy, and the asthma control rates were compared between the two groups. Further, we explore the influencing factors of medication adherence in the two groups.

Results: The mean score of MMAS-8 was 5.8 ± 1.8, and 39.5% (58) of the asthma patients had poor adherence to ICS therapy. The mean score of ACT was 19.1 ± 3.8, and 30.6% (45) of the patients had uncontrolled asthma. Compared with patients with poor adherence, those with good adherence to ICS therapy had a higher asthma control rate ($P<0.05$). In addition, results showed that age was an independent factor influencing medication adherence in children with asthma, and better medication adherence was observed in older children.

Conclusion: The adherence to ICS therapy in outpatient children with asthma is still not satisfactory. Clinical pediatrician and pharmacists should take relevant intervention measures to improve the adherence to ICS therapy and enhance the asthma control level

of outpatient asthma patients.

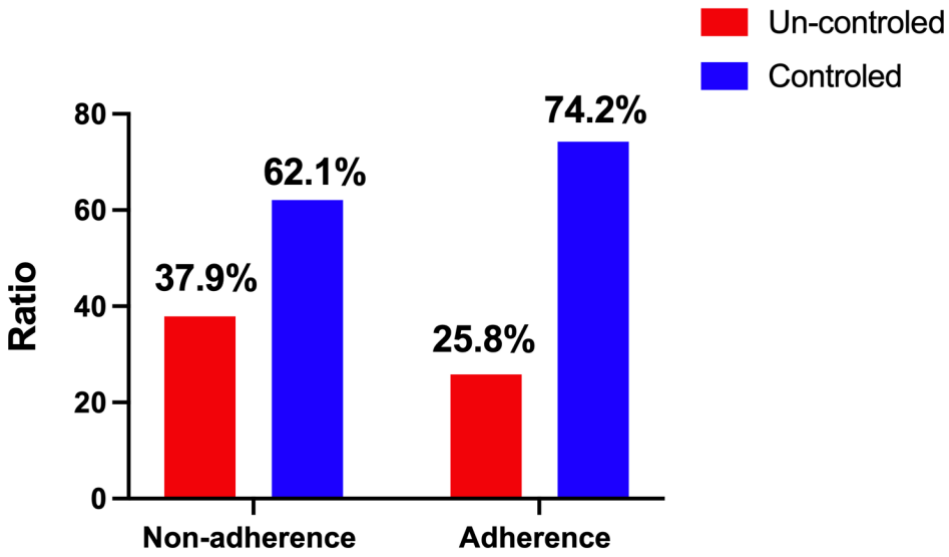
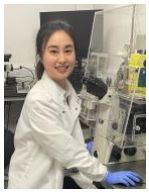


Figure 1. Relationship between adherence and asthma control

Biography

Fengxia Ding is a respiratory medicine physician and pediatrician from Children's Hospital of Chongqing Medical University, one of the top three children's hospital in China. Now she is working as a postdoctor in Great Ormond Street Institute of Child Health, University College London (UCL). She has been working as a pediatrician for 7 years in Children's Hospital of Chongqing Medical University, and there are more than 19,000 outpatient pediatric patients visit she every year. She got a patent in respiratory diseases, and has published many scientific research papers focussing on respiratory disease and asthma. She has presented her clinical and research work at many conference and got many grands on her researches.

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About Research Topic

Asthma is one of the most common chronic respiratory diseases in children. Inhaled corticosteroids (ICS) is the first-line drug for controlling asthma-related inflammation and can significantly improve asthma symptoms while reducing asthma-related morbidity and mortality. Studies have shown that regular use of ICS can reduce the proportion of patients with asthma exacerbations requiring hospitalization. However, overall asthma control rates among asthma patients are still low, and poor adherence to ICS therapy may be a contributing factor. Poor adherence to ICS therapy is common, with only 22%-63% of asthma patients being adherent. The 8-item Morisky medication adherence scale (MMAS-8) has been widely used to evaluate medication adherence in patients with hypertension, irritable bowel syndrome, type 2 diabetes, and chronic heart failure. Evaluating and analyzing the factors influencing medication adherence in pediatric asthma outpatients receiving ICS treatment help to improve the level of asthma control and management in pediatric asthma.

About Institution

Children's Hospital of Chongqing Medical University (CHCMU) is a comprehensive and a leading pediatric hospital in China, providing comprehensive medical care to children, including diagnosis, treatment, and rehabilitation. It is one of the largest and most well-equipped pediatric hospitals in southwest China. CHCMU has a long history of providing high-quality medical care for children. The hospital has over 1,200 beds, more than 30 clinical departments, and a team of over 2,500 medical professionals, including many renowned experts in their respective fields. The hospital provides

exceptional medical care to children and contributing to the advancement of pediatric medicine through research and education

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