**Purpose of the Study.** To compare the efficacy of inhaled corticosteroids with that of orally or intravenously administered corticosteroids in the treatment of acute moderate/severe asthma.

**Study Population.** The 135 subjects were 6 to 17 years of age, with at least 1 previous episode of wheezing, and were recruited from 1 of 2 emergency centers (ECs) after presentation with acute asthma symptoms.

**Methods.** Patients were randomized, after receiving an initial dose of albuterol, to 1 of 3 corticosteroid treatment groups if their Wood asthma scores were 4 or 5. All patients received their corticosteroid dose within 15 minutes after the initial albuterol dose: Group A received triamcinolone (600 μg, 100 μg/puff) via inhaler with a spacer, group B received orally administered prednisone (2 mg/kg), and group C received intravenously administered methylprednisolone (2 mg/kg). The decision to hospitalize was made by the EC attending physician, without input from investigators. After EC discharge, group A patients continued to receive triamcinolone (6 puffs 3 times daily for 1 day and then 4 puffs 3 times daily for 3 days); group B and C patients continued to receive orally administered prednisone (1 mg/kg twice daily for 4 days). Outcomes were the number of patients hospitalized from each treatment group and the number of unscheduled return visits 1 week after discharge from the EC.

**Results.** Seven percent of group A patients were hospitalized, compared with 22% and 29% of patients in groups B and C, respectively (P = .020). There were significantly more unscheduled return visits in groups B and C (41.5% combined), compared with group A (12%; P = .007). Hospitalizations or unscheduled return visits were considered treatment failures; rates were 19%, 62%, and 70% in groups A, B, and C, respectively (P = .001).

**Conclusions.** Patients who received inhaled triamcinolone were less likely to be hospitalized for treatment of acute asthma, compared with those who received orally or intravenously administered corticosteroids. Patients who received inhaled triamcinolone had significantly fewer unscheduled return visits 1 week after EC discharge, compared with patients in the oral or intravenous corticosteroid treatment groups.

**Reviewers’ Comments.** This was a small, prospective, clinical trial, suggesting that children with asthma could be effectively treated with inhaled corticosteroids in an acute care setting and might experience fewer treatment failures, compared with those who received orally or intravenously administered corticosteroids. One major limitation of the study was the lack of blinding. The attending EC physician might have been biased and more likely to discharge patients from the EC if they were in the inhaled corticosteroid group. Other limitations included the small number of patients and a poorly defined asthma diagnosis. A larger, prospective, double-blind study in a well-defined asthma population would strengthen these findings and might change acute asthma treatment.

**ORAL PREDNISOLONE IN THE ACUTE MANAGEMENT OF CHILDREN AGE 6 TO 35 MONTHS WITH VIRAL RESPIRATORY INFECTION-INDUCED LOWER AIRWAY DISEASE: A RANDOMIZED, PLACEBO-CONTROLLED TRIAL**


**Purpose of the Study.** Systemic corticosteroid use for the treatment of acute wheezing among preschool-aged children is controversial, with a recent meta-analysis finding only marginal positive effects with orally administered corticosteroids among children <24 months of age. The objective of this study was to investigate the efficacy of oral prednisolone treatment of virally induced lower respiratory disease among young children.

**Study Population.** The clinical population included 230 children, 6 to 35 months of age, who presented with virally induced lower respiratory disease. Children with previous asthma or ≥2 wheezing episodes were excluded.

**Methods.** The study was a randomized, double-blind, placebo-controlled trial involving treatment with orally administered prednisone (2 mg/kg per day) or placebo for 3 days. Measured outcomes included the effects of treatment on symptoms, hospital length of stay, and duration of illness.

**Results.** Hospitalization rates were similar for the 2 groups. However, for admitted children (n = 123), the median length of stay was 1 day shorter in the prednisolone group (2 days vs 3 days, P = .060). The proportions of children who required ≥3 days of hospitalization were 48% in the prednisolone group and 68% in the placebo group (P = .023). There was also a reduction in the need for additional asthma medication (18.0% vs 37.1%, P = .018) in the prednisolone group. The mean duration of symptoms of respiratory distress was 1 day in the prednisolone group, compared with 2 days in the placebo group, for both the hospitalized (P < .001) and nonhospitalized (P = .006) children.

**Conclusions.** A 3-day course of oral prednisolone therapy effectively reduced disease severity, length of hospital stay, and duration of symptoms among children, 6 to 35 months of age, with virally induced lower respiratory disease.

**Reviewer’s Comments.** This study is reassuring, indicating that the common practice of using orally administered corticosteroids in the treatment of infants and toddlers with lower respiratory infections seems to be effective, even among first-time wheezers.

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**EFFECTS OF Budesonide Inhalation Suspension, Compared with Cromolyn Sodium Nebulizer Solution, on Health Status and Caregiver Quality of Life in Childhood Asthma**


**Purpose of the Study.** To compare the effects of 2 nebulized antiinflammatory asthma medications on asthma control and caregiver quality of life.

**Study Population.** Children 2 to 6 years of age, with mild/moderate persistent asthma, were studied.

**Methods.** This was a 52-week randomized trial in which the children received either budesonide inhalation suspension (0.5 mg once or twice daily) (N = 168) or cromolyn sodium nebulizer solution (20 mg 4 times daily) (N = 167) initially for 8 weeks, after which the dosage was adjusted at the discretion of the investigator. The Pediatric Asthma Caregiver’s Quality of Life Questionnaire, Compliance/Caregiver Satisfaction Questionnaire, and Modified Child Health Questionnaire-Parent Form 50 and Functional Status-II(R) questionnaires were administered at baseline and at weeks 8, 28, and 52. At the conclusion of the
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