ABSTRACT

BACKGROUND:

Acute bronchiolitis is the most common condition in children with rapid respiration, chest retractions, and wheezing. RSV is the most common cause for acute bronchiolitis. Up to 3% of all children are hospitalized with acute bronchiolitis in their first year of life. Despite the high prevalence of acute bronchiolitis, little consensus exists on the optimal management of the disease. Management of acute bronchiolitis is mainly supportive. Various bronchodilators have been used in the treatment. None have been found to be efficacious.

AIMS AND OBJECTIVES:

To compare the effectiveness of nebulised adrenaline, nebulised salbutamol and nebulised budesonide in the treatment of acute bronchiolitis in terms of clinical improvement, decrease in respiratory distress and duration of hospital stay.
MATERIALS AND METHODS:

Children in the age group of 2 months to 2 years with bronchiolitis admitted in the Pediatric ward, Government Mohan Kumaramangalam Medical College Hospital, Salem. It is a Hospital based prospective interventional double blinded randomized trial.

All cases of acute bronchiolitis with a Respiratory Distress Assessment Instrument (RDAI) score of 4 to 15 [on a scale of 0 (mild) to 17 (severe)] were included. The children were randomised into 3 groups. The drugs A, B and C were given according to the random number. The drugs were not disclosed initially. All children received supportive care.

STATISTICAL ANALYSIS:

Data were analyzed using SPSS 23. Statistical methods used were t test, chi square test and Anova.

RESULTS:

Out of 90 enrolled in our study, 30 were given drug A, another 30 were given drug B and another 30 were given drug C. There was improvement in all the 3 Groups in terms of HR, RR, and RDAI. GROUP B had significant improvement compared to other Groups. Group B drug was found to be ADRENALINE.
CONCLUSION:

Group B that is use of nebulised adrenaline brought about symptomatic improvement in the decrease in tachycardia, tachypnoea and RDAI score and the difference was significant. Hence Group B, nebulised adrenaline was found to be effective in acute control of symptoms. However, saturation and duration of hospital stay did not vary between the groups.

KEY WORDS:

Bronchiolitis; Nebulised Adrenaline; Randomised