Is Magnesium Sulfate Treatment Really Effective in Moderate to Severe Bronchiolitis?

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Abstract

Objectives: The aim of our study is to examine the efficacy and safety of intravenous magnesium sulfate in moderate-severe acute bronchiolitis. Working hypothesis: Intravenous magnesium sulfate treatment may be effective in the treatment of patients with bronchiolitis . Study design: Retrospective, single-center cohort study Methodology: We conducted a study in 150 infants presenting with moderate to severe acute bronchiolitis. A total of 150 infants aged 1 month to 2 years who presented with acute bronchiolitis to our pediatric emergency department between January 2018 and March 2019 were admitted into the study. The demographic characteristics, clinical score, and management of the patients were examined. Results: A total of 150 infants were analyzed: 62 in the magnesium sulfate group (Group I) and 88 in the supportive care group (Group II). Baseline clinical characteristics were similar in both groups. Length of hospitalization was significantly shorter in Group II. Clinical severity scores were also lower significantly earlier in Group I (p=0.031, p=0.008, respectively at first and fourth hour). Conclusions: Intravenous magnesium treatment in moderateto severe acute bronchiolitis does not appear to conferany significant decrease in clinical severity scores when compared to only supportive care

TİTLE PAGE

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Author Contribution

MD Bodur, and Prof Tuygun and Karacan conceptualized and designed the study, drafted the initial manuscript, and reviewed and revised the manuscript.

Drs Güngör, Öztürk, Güneylioğlu and Yaradılmış designed the data collection instruments, collected data,

Dr Akca Çağlar, Tekeli, Göktuğ carried out the initial analyses, and reviewed and revised the manuscript

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

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