

Bronchiolitis in the last ten years in a tertiary paediatric department: evaluation of evidence-based guidelines

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Introduction

Many evidence-based guidelines recommend decreasing the use of diagnostic testing and therapies including bronchodilators, corticosteroids and antibiotics for patients with bronchiolitis. The aim of the study was to compare two years, 2002 and 2012, in the bronchiolitis management and treatment. We hypothesized that diagnostic testing and therapies above mentioned would decrease after the release of the guidelines.

Methods

We analyzed, from medical records, all patients that were hospitalized for bronchiolitis in 2002 and 2012 in our tertiary paediatric department.

Results

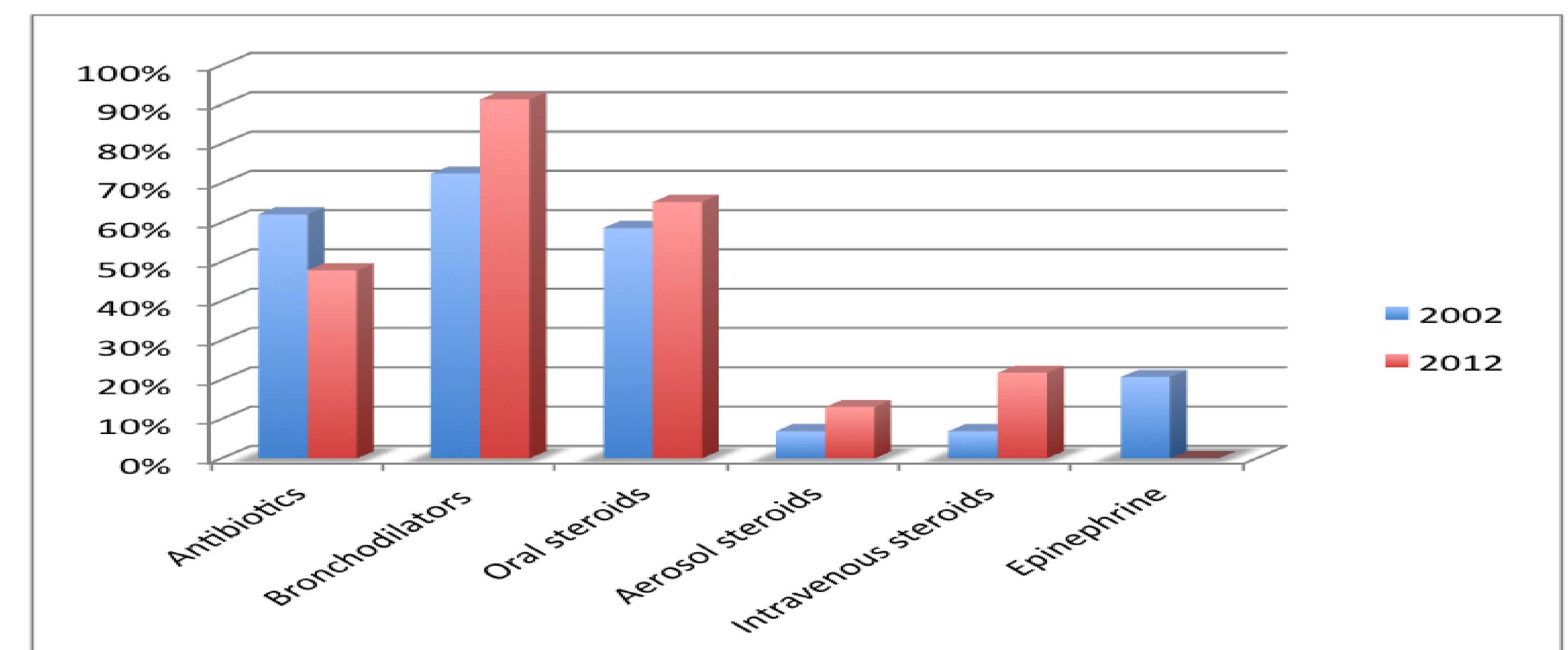
52 subjects were studied: 29 in 2002 e 23 in 2012. The median age was 5.1 and 5.9 months, respectively and there were no differences in sex and clinical presentation score.

Oxygen was used in 44.23% (27.6% vs 65.2%, $p=0.50$), bronchodilators were prescribed in 80.8% (72.4% vs 91.3%, $p=0.10$), systemic steroids in 61.5% (58.6% vs 65.22%, $p=0.62$), antibiotics in 55.8% (62.1% vs 47.8%, $p=0.38$), without any statistical differences between the two periods (see **Figure 1**).

Epinephrine was given in 11.5% of children (20.1% vs 0%, $p=0.03$).

Chest x-rays were performed in 19.2% (31.0% vs 8.7%, $p=0.12$). Respiratory syncytial virus research was conducted in 50% (51.7% vs 47.8%, $p=0.67$). We considered the medications prescribed at discharge: they were prescribed in 94% of patients (93.1% vs 95.7%, $p=0.37$).

Figure 1



Conclusions

Despite accurate guidelines, the diagnostic and therapeutic management of bronchiolitis has not changed in ten years and a lot of drugs and diagnostic tests are still used. According to these data, we decided to adopt more strict diagnostic and therapeutic criteria.

Bibliography

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