

# MANAGEMENT OF BRONCHIOLITIS IN HOSPITALIZED CHILDREN

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Bronchiolitis is a common cause of hospitalization in infants. Clinical guidelines recommendations are based on supportive treatment. Pharmacological treatment is reserved to severe cases

## Aim and objectives

To analyze the prescription of recommended drugs used for the treatment of bronchiolitis in bronchiolitis patients under the care of Pediatric Service (PS)

## Material and methods

Retrospective, observational study in a regional hospital. We selected recommended drugs by the pediatrics guidelines. Bronchiolitis inpatients with any of these drugs prescribed by PS during January 2020 were included. Data: demographics, length of admission, respiratory syncytial virus(RSV) test results, bronchiolitis treatment, oxygen therapy, oxygen saturation, respiratory rate, wheezing, accessory muscles use, antibiotic therapy. Bronchiolitis treatment was classified according to its therapeutic activity: Bronchodilators (BD): epinephrine, salbutamol and ipratropium; glucocorticoids (GC); and hypertonic serum(SH). Patients were classified according to Wood-Downes severity scale (WDS) and the prescribed treatment. The data were achieved from the electronic prescription program and digital medical record.



**48**  
**PATIENTS**

52% women  
Mean age 3 months [0.77-11]



**AVERAGE**  
**STAGE 4days**



70% RSV  
(5% also Influenza A virus)

Previous palivizumab on 6% patients

WDS classification - number of drugs during admission:

- Mild condition 16% - 2.25 drugs
- Moderate condition 47% - 2.08 drugs
- Severe condition 35% - 2.64 drugs.
- Drugs during admission for all patients: 2.3

- **12%** antibiotic therapy (alone or in combination) (**100%** clavulanic amoxicillin, **50%** ampicillin, **2%** cloxacillin, **2%** cefotaxime)
- **95%** SH
- **73%** adrenaline
- **37%** salbutamol
- **29%** corticosteroid
- **73%** oxygen therapy (PO<sub>2</sub> 94%).

## Conclusion and relevance

- No differences between **patient's severity and the number of prescribed drugs.**
- Salbutamol and adrenaline's prescriptions **despite there are limited evidence** of its use in bronchiolitis.
- Oxygen therapy applies when **oxygen saturations are above** the recommendations.
- The treatment used in bronchiolitis should be reviewed **promoting a rational use of the drug and therapies based on evidence**, avoiding over-medication.