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| **Study reference** | **Study characteristics** | **Patient characteristics 2** | **Intervention (I)** | **Comparison / control (C) 3** | **Follow-up** | **Outcome measures and effect size 4** | **Comments** |
| Modaressi, 2012 | Type of study:  RCT  Setting and country:  - Inpatients  - Iran  Funding and conflicts of interest:  Conflict of Interest: The authors declare that they  have no competing interests.  No funding reported. | Inclusion criteria:  The target population included 1 month to 2 year old infants admitted to Amin and Al-Zahra hospitals and diagnosed as acute bronchiolitis by  the ICU or ward physicians.  Exclusion criteria:  Children with history of two or more  respiratory distresses, wheezing, family history of asthma, those who suffered from chronic pulmonary heart disease, suspected heart disease, bronchomalacia, previous use of bronchodilator and glucocorticoids, those treated with  monoamino oxydase inhibitors (MAOI), tachycardia >180/min, and respiratory rate >100/min,[4,10-16] were not included in the study.  N total at baseline:  - 40 were randomized  Intervention:  N = unknown  Control:  N = unknown  Important prognostic factors2:  *age days, Mean (± SD):*  I: 364±210.4 days  C: 409.6±207.6 days  *Sex % M:*  Overall: 20 (50%)  I: unknown  C: unknown  *RDAI severity score, Mean (± SD):*  I: 12.8 ± 2.4  C: 14.3 ± 1.8  Groups comparable at baseline?  yes | The first group  was given one dose of 0.1 ml/kg l-epinephrine in a  concentration of 1.10000.  Each volume was 3 cc, which was nebulized using  oxygen flow 8 liters per minute. Three doses of  each medication at intervals of 20 minutes were  prescribed; 10 minutes after the third dose, the  patient was rated again by Respiratory Distress  Assessment Instrument (RDAI)  During this medication, no other medications like antibiotics and steroids were prescribed for them. | The other group  received salbutamol 0.15 mg/kg at a minimum  volume of 1 mg mixed with normal saline.  Each volume was 3 cc, which was nebulized using  oxygen flow 8 liters per minute. Three doses of  each medication at intervals of 20 minutes were  prescribed; 10 minutes after the third dose, the  patient was rated again by Respiratory Distress  Assessment Instrument (RDAI)  During this medication, no other medications like antibiotics and steroids were prescribed for them. | Length of follow-up  No follow-up or incomplete data reported.  Patients were monitored until discharged from hospital (max 5 days). | LOS days, Mean ± SD  I - Epinephrine: 3±0.9  C - Salbutamol: 3.7±1.1  p=0.03  RDAI, Mean ± SD  After 10 minutes  I - Epinephrine: 10.6 ± 2.1  C - Salbutamol: 12.6 ± 1.4  After 180 minutes  I - Epinephrine: 8.2 ± 2.2  C - Salbutamol: 10 ± 1.5  After 1 day  I - Epinephrine: 4.5 ± 1.5  C - Salbutamol: 7.3 ± 2  After 2 days  I - Epinephrine: 3.1 ± 2.2  C - Salbutamol: 4.3 ± 2.6  After 3 days  I - Epinephrine: 1.8 ± 2.4  C - Salbutamol: 3 ± 2  After 4 days  I - Epinephrine: 0  C - Salbutamol: 1.3 ± 1.3  After 5 days  All zero  p=0.02 | This was a triple-blind study, i.e. the patient, physician and statistical analyst were  unaware of the treatment.  N per group and most baseline characteristics are not mentioned.  Article conclusion: Regarding the effect of epinephrine on reduction of hospitalization duration and the RDAI index in patients with acute bronchiolitis, it seems that using epinephrine instead of salbutamol could be more  effective in the management of the disease. |