Nebulised hypertonic saline effective for acute bronchiolitis in infants

Clinical question	How effective is nebulised hypertonic saline solution in infants with acute viral bronchiolitis?
Bottom line	Compared to treatment with nebulised 0.9% saline, nebulised 3% saline produced a 25.9% reduction (0.94 days) in the mean length of hospital stay among infants hospitalised with viral bronchiolitis. The 3% saline group also had a significantly lower post-inhalation clinical score than the 0.9% saline group in the first 3 days of treatment. The effect of nebulised hypertonic saline in improving clinical score was greater among outpatients than inpatients. No adverse events related to the 3% saline inhalations were reported.
Caveat	Three trials did not use analysis on an intention-to-treat basis. The sample size of the review was relatively small, and the statistical power of the studies may have been sufficient for some but not for other outcome measures. The optimal delivery intervals and concentration of saline, and the most effective delivery devices remain to be determined.
Context	Acute viral bronchiolitis is the most common lower respiratory tract infection in infants. The standard treatment remains supportive care. Nebulised hypertonic saline solution may reduce airway oedema and mucus plugging, the main pathological changes, and decrease airway obstruction.
Cochrane Systematic Review	Zhang L et al. Nebulised hypertonic saline solution for acute bronchiolitis in infants. Cochrane Reviews 2008, Issue 4. Article No. CD006458. DOI: 10.1002/14651858.CD006458.pub2. This review contains 4 trials involving 254 participants.
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[References]

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