SHORT-TERM EFFECTS OF RESPIRATORY PHYSIOTHERAPY IN INFANTS WITH BRONCHIOLITIS AND OUTPATIENT CARE: A MULTICENTRE STUDY

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1. INTRODUCTION | Acute Bronchiolitis is the most common lower respiratory infection in infants. In mild and moderate severity, in many cases, needs outpatient care. We aimed to evaluate the immediate efficacy of respiratory physiotherapy (RP) in infants with mild and moderate bronchiolitis with outpatient care.

2. METHODS | Quasi-experimental prospective, double-blind, multicenter study with 137 children. We evaluated the patients with the Wang scale, oxygen saturation (SaO2), heart rate (HR) and respiratory rate (RR). A single session of RP, which included prolonged slow expiration and provoked cough, was performed.

3. RESULTS
Baseline clinical characteristics of the participants were 43.1% (59♀) and 59.9% (78♂), of between 8.2±2.5 months of age, 8.4±1.6 kg of weight and 69.3±5.4 cm of height. We obtained significant changes in all the variables measured independently, regardless of whether they were infants <6 or >6 months: HR (<6 months P=0.023, >6 months P=0.037), SaO2 (<6 months P=0.01; >6 months P<0.001), RR (<6 months P = 0.021; > 6 months P <0.001). We obtained significant changes in the Wang scale both between the pre-treatment sessions and at 48 hours (p <0.001), with a progressive reduction of patients with a Mild level (86 [62.8%], 62 [45.3%], 5 [3.6%] respectively) and an increase of those who presented a Normal level (0 [0%], 75 [54.7%], 132 [96.4%] respectively).

4. CONCLUSION | The inclusion of a single session of RP improves short-term Wang's severity scale, heart rate, respiratory rate and oxygen saturation in infants with mild and moderate bronchiolitis.