



Effectiveness of airway clearance techniques in children hospitalized with acute bronchiolitis.

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OBJECTIVE:

To evaluate the effectiveness of two airway clearance techniques (ACT's) in children <24 months hospitalized with mild to moderate bronchiolitis.

DESIGN:

One hundred and three children were randomly allocated to receive one 20-min session daily, either assisted autogenic drainage (AAD), intrapulmonary percussive ventilation (IPV), or bouncing (B) (control group), ninety-three finished the study.

OUTCOME MEASURES:

Mean time to recovery in days was our primary outcome measure. The impact of the treatment and the daily improvement was also assessed by a validated clinical and respiratory severity score (WANG score), heart rate (HR), and oxygen saturation (SaO₂).

RESULTS:

Mean time to recovery was 4.5 ± 1.9 days for the control group, 3.6 ± 1.4 days, P < 0.05 for the AAD group and 3.5 ± 1.3 days, P = 0.03 for the IPV group. Wang scores improved significantly for both physiotherapy techniques compared to the control group.

CONCLUSION:

Both ACT's reduced significantly the length of hospital stay compared to no physiotherapy.

KEYWORDS:

Airway clearance techniques; autogenic drainage; bronchiolitis; intrapulmonary percussive ventilation; respiratory physiotherapy

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