



**12.º Congresso Brasileiro de
Terapia Intensiva Pediátrica**
**11.º Congresso da Sociedad LatinoAmericana de
Cuidados Intensivos Pediátricos**
13 a 16 de junho de 2012
São Paulo - SP

Trabalhos Científicos

Título: Changes In The Practice Of Mv That Took Place In Cohorts Between 1999 And 2008 In Picus. Multicenter Study

Autores: ANALIA FERNANDEZ (); EZEQUIEL MONTEVERDE (); JULIO FARIAS ()

Resumo: Analía Fernandez, Ezequiel Monteverde, Julio Farias; On behalf of Sociedad latinoamericana de cuidados intensivos pediátricos (SLACIP) and Comité pediátrico de neumonología crítica de la Sociedad de Argentina de terapia Intensiva Background: Substantial changes in mechanical ventilation (MV) have taken place over the last ten years in both adult and pediatric medicine. In spite of this, no single study has evaluated the impact of these changes in everyday pediatric practice. Objectives: To assess the changes in the practice of MV that took place in cohorts between 1999 and 2008. Methods: In 1999 we conducted an international study over a one month period in a cohort of 659 patients in MV in 36 pediatric intensive care units (PICUs) in Latin, Central, and North America and Europe. In 2008 we performed another study with a similar protocol on 1185 patients in 60 PICUs in Latin and Central America, Spain and Portugal. The epidemiological information on each cohort has already been published. In order to assess changes in practice, we compared data on patients belonging to units that participated in both studies (366 from the first cohort and 526 from the second). Results: From 1999 to 2008, the use of noninvasive ventilation (NIV) increased from 0.5% to 12.2% ($p<0.001$). In patients with acute respiratory distress syndrome (ARDS), tidal volumes and positive end expiratory pressure (PEEP) did not differ significantly (9.1 vs. 9.9 ml/kg, $p=0.239$ and 8.1 vs. 8.8 cmH₂O, $p=0.743$, respectively) from levels in 1999. The use of synchronized intermittent mandatory ventilation decreased significantly (25.6 vs. 11.2%, $p<0.001$) and there was a clear preference for spontaneous breathing trials (SBT) over the gradual reduction of ventilatory support (62.3% vs. 27.8%, $p<0.001$) as the method of weaning. Conclusions: Our findings confirm those of others in the last decade. There was a greater utilization of NIV as the first choice for MV as well as SBT as a method of weaning from MV. As for the setting of MV in ARDS, we could find no differences between 1999 and 2008..