Pneumologia | Casuística / Investigação

CO-035 - (1JDP-10233) - HOME RESPIRATORY TECHNOLOGIES, MAINLY HOME-VENTILATION, IN CHILDREN WITH CHRONIC DISEASES REDUCE HOSPITALIZATIONS

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Introdução e Objectivos

Respiratory technology-dependent children (RTDC) need special care. The aim of this study was to describe the RTDC in a specialized centre and to study hospitalizations pre- and post-technologies' initiation.

Metodologia

Cross-sectional, retrospective study of all RTDC from a referral hospital in January 2020. RTDC was defined as any medically stable patient requiring respiratory technologies' aid at home. Clinical records were used for data collection. Paired-samples analysis were performed for hospitalizations.

Resultados

From a total of 178 RTDC, 56.2% were male, median age at technology initiation of 7 years (0 months - 19 years). In 58.2% technologies' initiation was in ambulatory care. Disease prevalence were: neurologic (24.3%), dysmorphic (21.5%), neuromuscular (19.8%), primary pulmonary (15.8%) and upper airway diseases (10.7%). The technologies used were: non-invasive ventilation [NIV] (56.7%), invasive ventilation (6.2%), mucociliary clearance (53.9%), supplemental oxygen (19.1%) and long-term aerosol therapy (14.6%). Most of the children with upper airway diseases started ventilation in ambulatory care (2 times more), and most of those with dysmorphic diseases started in-hospital (2.2 times more). The initiation of technologies was associated to less hospitalizations (p=0.049), and children in home-ventilation benefit the most (p=0.034). Ambulatory initiation of ventilation was associated to 50% less hospitalizations (p=0.015), but not those with in-hospital initiation.

Conclusões

The majority of RTDC started respiratory technologies in ambulatory, and NIV was the most used. The initiation of home-ventilation was associated to less hospitalizations, specifically those started in ambulatory (children with more upper airways and less dysmorphic diseases).

Palavras-chave : Paediatric Pulmonology, Non-invasive ventilation, Technology-dependent