

DOI: 10.5152/TurkThoracJ.2019.163

[Abstract:0843] OP-015 [Accepted: Oral Presentation] [Pediatric Lung Diseases]

Pediatric Long Term Home Ventilation: Marmara University Experience

Nilay Baş İkizoğlu¹, Pınar Ergenekon², Emine Atağ³, Yasemin Gökdemir², Ela Erdem Eralp², Fazilet Karakoç², Bülent Karadağ², Refika Ersu²

¹Division of Pediatric Pulmonology, Süreyyapaşa Chest Diseases and Chest Surgery Training and Research Hospital, İstanbul, Turkey

²Division of Pediatric Pulmonology, Marmara University School of Medicine, İstanbul, Turkey

³Division of Pediatric Pulmonology, Ümraniye Training and Research Hospital, İstanbul, Turkey

Objectives: The use of invasive or noninvasive ventilation at home in children with chronic respiratory failure or obstructive sleep apnea syndrome has increased substantially over the last years. In our study, we aimed to determine the clinical characteristics of patients who were started on long term home ventilation in our department.

Methods: The data of the children receiving long term invasive or noninvasive ventilation treatment at home who were followed in Marmara University, Department of Pediatric Pulmonology between 2002-2017 were evaluated retrospectively.

Results: Data of 219 patients who received invasive or noninvasive home ventilation were evaluated. Between 2002 and 2011, 68 (31%) children and between 2012 and 201, 151 (69%) children underwent home ventilation. Of all patients, 123 (56.2%) were male and 96 (43.8%) were female. The median age at initiation was 3.9 (IQR 1-10) years. The indication for treatment was lung pathology in 70 (32%) children, central nervous system pathologies in 54 (24.7%) children, neuromuscular disease in 53 (24.2%) children and obstructive sleep apnea syndrome in 42 (19.2%) children. Noninvasive ventilation was initiated in 125 (57%) patients, invasive ventilation support was started in 94 (42.9%) patients and oxygen support was used in 114 (52.1%) patients. While 99 (45%) of the patients were still receiving respiratory support at the time of the study, 16 (7.3%) patients were weaned successfully. 43 (20%) patients died and 59 patients (26.9%) were lost to follow-up.

Conclusion: In our study, it was observed that the number of patients who received long term ventilation at home increased over the years. Our study was planned as a pilot study for developing a European registry for patients on long term home ventilation. Determining the characteristics and clinical course of these patients by establishing a database is important in terms of determining the needs of patients and families and planning appropriate follow-up and treatment.

Keywords: Noninvasive ventilation, home ventilation, long term ventilation, chronic respiratory failure, obstructive sleep apnea syndrome, children