

1.16 A review of the use of domiciliary non-invasive ventilation in a tertiary hospital

Arshima Rasheed¹, Margaret Higgins¹, Renata Behan¹, Valerie McKay¹, John F. Garvey¹

1. Department of Respiratory and Sleep Medicine, St. Vincent's University Hospital, Dublin, Ireland

Background: Non-invasive ventilation (NIV) represents a therapeutic option for many conditions including a range of respiratory, neurological and musculoskeletal disorders. In our institution, we care for a wide spectrum of these conditions and thus, in 2021, we established optimisation clinics for patients on long-term domiciliary NIV.

Methods: We set out to review the patients attending our service for NIV. We reviewed the indications and pressure settings that provided therapeutic benefit for our patients.

Results: We reviewed 8 patients in total. 3 patients were male and 5 patients were female. The mean age was 50.8 years \pm 16.7 representing a wide range in age. 50% of patients (n=4) carried a documented diagnosis obesity hypoventilation syndrome (OHS), 25% (n=2) patients had a diagnosis of kyphoscoliosis, 1 patient (12.5%) had a diagnosis of progressive central hypoventilation and 1 (12.5%) had a diagnosis of motor neuron disease (MND). The variation of NIV pressures used to treat these patients are outlined in **Table 1**.

Conclusion: Our data indicated that a variety of pathologies require domiciliary NIV. The pressure requirements are typically higher than those traditionally advocated for use in the initiation of NIV in acute settings and that an individualistic approach to NIV management can significantly impact hospital admissions in select cases.

Table 1.

Patient no.	Diagnosis	IPAP	EPAP
1.	OHS	22	10
2.	OHS	22	10
3.	Kyphoscoliosis	24	8
4.	OHS	22	12
5.	Kyphoscoliosis	17	7
6.	Progressive idiopathic central ventilation	20-26 (AVAPS targeting TV 520mls)	8
7.	MND	16	7
8.	OHS	20	11

Table 1. highlights the range of NIV pressures used at treat our patients. *Abbreviations: AVAPS: average volume-assured pressure support (AVAPS); TV: tidal volume*

Keywords

Non-invasive ventilation; obesity hypoventilation; kyphoscoliosis; motor neurone disease

Disclosures

No relevant disclosures to declare