

How does managing NMD-related respiratory issues differ from COPD or asthma?

Chronic Obstructive Pulmonary Disease (COPD) and Asthma

The challenge is getting air past obstructions in the lungs and airway. Additional pressure (with a ventilator) may be required. When lung tissue is damaged and the maximum ventilation (deepest breath) is insufficient to supply adequate oxygen to the blood, supplemental oxygen (O₂) is usually prescribed.

Restrictive Lung Disease

When a patient is having respiratory problems due to neuromuscular disease (NMD), post-polio syndrome (PPS), or high-level spinal cord injury (SCI), the issue is muscle strength or control. The lungs are rarely directly damaged or obstructed by these conditions; rather, poor muscle strength or control causes hypopnea (shallow breathing) which inevitably leads to hypercapnia (CO₂ retention) which may result in poor sleep, morning headaches, loss of appetite, and weakness. Left untreated, hypercapnia can lead to coma and death.

WARNING Supplemental O₂ is not a replacement for proper ventilation!

For NMD, PPS, and SCI patients, continuously monitor EtCO₂ levels with capnograph when administering O₂ for sustained periods. (Blood gas CO₂ is not as informative as EtCO₂.) EtCO₂ > 43 mmHg indicates hypercapnia. Failure to treat hypercapnia with proper ventilatory support can lead to coma and DEATH.

Stamp

Mail to...



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www.DoctorBach.com and www.NIVnetwork.com



Respiratory Management

for patients with
Neuro-Muscular Diseases
Post-Polio Syndrome
Spinal Cord Injury

Utilizing non-invasive ventilation (NIV) to manage hypopnea and hypercapnea caused by Restrictive Lung Disease.

**Millennium
Respiratory
Services**



A ventilator is just another tool.

Respiratory issues should not be viewed as "end stage" and do not need to be "life threatening."

Clear planning, education, and understanding can relieve anxiety and prepare both the patient and caregiver for this life-sustaining transition.

Why choose NIV?

Compared to a tracheostomy, non-invasive ventilation has been shown to...

- Increase quality of life
- Increase length of life
- Decrease hospitalizations
- Enhance speaking
- Decrease secretions
- Ease management (no suctioning)

NIV can be used for nighttime-only or 24/7 ventilation requirements.

Nighttime, occasional daytime, and infant care with nasal or face mask.

Full-time ventilation with a "microphone mouthpiece".

Congestion is quickly removed with the CoughAssist device.



Suggested Equipment for NIV

Portable oxymeter to monitor blood oxygen level.

Two portable IPPV* units (one for bedside and one for wheelchair).

CoughAssist for clearing secretions and aspirated food or liquids when oxymeter reading <95%, and for retaining lung elasticity.

Ambubag for air stacking and emergency backup if 24-hour vent dependent.

Nasal mask and/or "microphone mouthpiece".

Emergency oxygen (O₂) canister for use when _____.

* IPPV: Intermittent Positive Pressure Vent (volume vent). For some patients, *high-span* Bi-PAP (E.g.: 18/2) may be used in place of IPPV with a loss of portability.

"The Vest" is a good device for loosening congestion.



Why choose Millennium?

We know there are other care providers, but we believe you'll find few with the services, support, and experience available with Millennium Respiratory Services.

10 years experience
NIV specialists

*SMA *DMD *PPS *ALS *SCI

Clients include the MDA Clinic, Newark, NJ

- Dr. John R. Bach, Co-Director

What does Millennium offer?

Education and training.

Equipment sales and rentals.

In-hospital and in-home evaluation, support, and service.

Both NIV and tracheostomy support.

We bill insurance and medicare.

Informational Websites

www.Millennium-Respiratory.com

www.DoctorBach.com

www.CoughAssist.com

www.TheVest.com