

Kaine Rodriguez Thrives Thanks to Biphasic Cuirass Ventilation

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Kaine Rodriguez was born with Prune Belly Syndrome, which affects the abdominal muscles, and which, in turn, affect the respiratory muscles. For Kaine, this means he cannot cough or breathe effectively.

Kaine spent the first nine months of his life in and out of the hospital, with previous admissions every three



Kaine uses the biphasic cuirass vent system.

Photo credit: MitchCarr
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weeks for respiratory distress, pneumonia and respiratory syncytial virus. With each hospital admission, Kaine's mother, Monica, watched as her son endured oxygen as high as 5 LPM with helium, CPAP or BiPAP, suctioning and respiratory treatments four times per day.

Monica recalls during one of her son's admissions, "I thought Kaine was going to die." The physicians gave her son only 72 hours to live. But Kaine is a fighter, and fortunately, Dr. Adaobi Kanu, his pediatric pulmonologist, decided to try the Hayek RTX biphasic cuirass ventilation system with him.

Now 13 months old, Kaine is smiling at his mother and progressing much like other infants his age: crawling, walking and putting on some much needed weight.

Monica attributes much of Kaine's progress to the Hayek RTX. She is excited that Kaine has not been hospitalized for respiratory problems since April 2010 when he was initially

placed on the Hayek. Monica believes it has also helped strengthen Kaine's abdominal muscles.

Currently, Kaine uses the Hayek for four hours at night and receives respiratory treatments twice per day. When Kaine gets sick, his mother increases his ventilator time from four hours to eight hours at night and increases the number of respiratory treatments.

MSN HomeCare has been providing much-needed skilled nursing care for Kaine in his home. He has responded so positively to the respiratory care, the biphasic cuirass vent system and to his loving family and nurses that everyone is looking forward to Kaine's continued progress.

Monica is interested in sharing her and Kaine's experience with others and can be reached in Lubbock, Texas, at 806-239-9500. ▲

For inquiries about MSN HomeCare in-home vent-assisted nursing, please call Jan Mawhee, 214-234-6834 or email JanMawhee@MSNHealth.com.

MORE on www.ventusers.org

IVUN has added In-Home Care Agencies and Respiratory Home Care Companies/DME to its *Resource Directory for Ventilator-Assisted Living*.

If you know businesses that should be listed, send their contact information to info@ventusers.org

What is Biphasic Cuirass Ventilation?

The newest method of negative pressure ventilation utilizes a chest shell or cuirass (widely used during the polio epidemics in the 1950s). This external, noninvasive ventilation system is called “biphasic cuirass ventilation” because it offers both inspiratory and expiratory breathing cycles. The biphasic cuirass ventilator works much like natural breathing by creating negative (breathing in) and positive (breathing out) pressures to help the lungs expand and contract. It can also provide both higher tidal volumes and higher frequencies (from 6 to 1200CPM). The custom-fitted clear plastic shells can be used on infants through adults.



Biphasic cuirass ventilation also offers respiratory treatments in a secretion-clearance mode that assists with coughing, similar to the CoughAssist®, and a vibration mode that delivers high frequency chest wall oscillation to loosen up secretions, similar to The Vest®.

The ventilator is a small power unit with a single hose that attaches to the cuirass. The patient can receive ventilation or respiratory treatments by simply switching the modes on the power unit.

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The Hayek RTX biphasic cuirass ventilation system is manufactured by United Hayek Industries Medical Ltd, in London, England. It has been approved by the FDA for use in the United States and is Medicare/Medicaid reimbursable. (United Hayek also manufactured the Hayek Oscillator that was discontinued in the United States.)

For more information, go to www.unitedhayek.com or call 619-272-2333.