



Dr. Jacob Hen Jr
Mill Hill Medical Consultants, Bridgeport, Connecticut
Bridgeport Hospital/ Yale-New Haven Hospital

Dr. Hen specializes in pediatric pulmonology and pediatric critical care medicine. A 15-year old boy diagnosed with severe persistent asthma had been hospitalized 27 times, including three times in the ICU, with intubation, and missed many days of school. The boy lives with his mother, and has a wheelchair-bound sister. He had been treated by his referring pediatrician with high doses of oral steroids and high-dose inhaled steroids, long-acting beta-two agonists, leukotriene modifiers, medications for allergic rhinitis, and GERD therapy, yet pulmonary function did not improve, and he was continually using his albuterol inhaler. He had chronic rhinitis and gastric reflux. Long-term steroid use had resulted in bone demineralization.

The first several months of treatment by Dr. Hen resulted in no pulmonary improvement. Suspecting non-compliance, Dr. Hen reviewed the records and spoke to many residents and nurses who had seen the patient during his admissions. He questioned the patient and his mother. Both swore that he was using his medication as directed. Dr. Hen's practice has full electronic medical records, so he was able to check the pharmacy records and found the boy's prescriptions had been renewed each month.

As alternatives were eliminated, Dr. Hen was on the verge of notifying the state health department because the boy was at risk of imminent death. Then a trial version of Aerocrine's NIOX MINO technology arrived at the office for testing. It showed an eNO level of 78. Confronted with evidence of elevated inflammation, the patient confessed to systematically hiding his medication under his bed, where it was found. Upon resuming his high-dose oral steroids, his eNO levels came down to 17, and he was weaned to low-dose inhaled steroids. eNO levels stabilized at 11. He has had no more medical emergencies or school absences.

With the crisis averted, Dr. Hen discovered that many of the pulmonary symptoms were from paradoxical vocal cord motion, not asthma. Dr. Hen offers that the NIOX MINO technology helped him encourage the patient into admitting non-compliance, and that admission led him not only to take his medication but go into counseling to help him better handle the stresses of his home life. “It helped save his life,” says Dr. Hen.

Dr. Jacob Hen is the Director of Pediatric Intensive Care Unit, Chief Pediatric Pulmonology and Director, Pediatric Asthma Center with Bridgeport Hospital. He practices with Mill Hill Medical Consultants in Bridgeport, Connecticut.