

New technology gives preemies stronger start

Advances in care at Jersey City Medical Center's Neonatal Intensive Care Unit (NICU) have given newborns, some as small as 500 kilograms (about one pounds), a fighting chance not only to survive but to lead normal and healthy lives.

According to Dr. Suhail Alsheikh, who has practiced Neonatal-Perinatal Medicine and Pediatrics at the medical center since first arriving in the 1970s as a resident, this was not always the case. Survival rates were once poor for babies born prematurely with low birth weight due and insufficiently developed lungs and other organs. Those who did survive often faced long-term health consequences.

Dr. Alsheikh and his team of specialists today have at their disposal the technology to provide better ventilation for babies with poorly developed lungs.

They are more aggressive in making sure these fragile newborns receive better nutrition. They have the ability to monitor for brain damage or bleeding in



the brain, and treat a variety of afflicting infections. They know now to treat these tiny babies with optimum oxygen exposure, which in the past was the primary culprit in causing blindness and other eye problems. And, they know the importance of closely following these patients for months and even years after they leave the hospital.

"We're able to do so much more for these babies today, even for the very smallest ones," said Dr. Alsheikh, the hospital's senior staff neonatologist.

"Babies are brought here from throughout the county, some of whom have been delivered after only 20 weeks of gestation (or more than five months prematurely).

Jersey City Medical Center serves as the county's only designated Regional Perinatal Center. Its Antenatal Center offer comprehensive diagnostic and treatment services for patients with high risk pregnancies. These services are provided by a full-time maternal fetal medicine specialist, geneticist, and specialized technicians.

Jersey City Medical Center's NICU treats approximately 7% of the babies delivered annually at the hospital. Another 15% are cared for in its intermediate care nursery.

Babies may stay several days or as long as several months in NICU, and benefit from such advances as:

- Endotracheal introduction of "Surfactant" to improve infants underdeveloped lungs;
- Special ventilators and other respiratory support devices that offer extra help for infants to breath;
- Feeding tubes that are either placed in the stomach or through or nose to deliver

breast milk or formula;

- Infant warmers, which are beds with radiant heaters that help maintain steady temperatures;
- Incubators, which are beds enclosed by clear, hard plastic to control temperatures;
- Intravenous nutrition and a variety of medications that may help with heart function, blood pressure, pain relief or other desired functions;
- Phototherapy, a special light therapy that eliminates bilirubin, the main pigment which, when elevated, causes the yellow discoloration of the skin called jaundice, a common condition seen among preemies.

"A special need infant clinic at nearby Columbus Health Center is an integral service provided for our high risk infants after their discharge," said Dr. Alsheikh. "They are assessed for growth and developmental milestones and directed to receive the proper service as needed.

"A combination of advanced



technology and a trained staff can make a huge difference in both treating these tiny patients successfully and seeing that they get their lives off on the right foot."