



Small Miracles

Preemies develop into healthy babies thanks to innovative treatments at Odessa Regional's NICU

When she was born at Odessa Regional Hospital, 14 weeks before her due date, Amber Jolie Rodriguez weighed less than two pounds. After weeks of struggling to treat her many health problems, the doctors prepared Amber's mother, Cynthia Ortiz, for the worst.

"The doctor came in and said there was one more thing they could do, and if they didn't try it, my baby wouldn't make it," Ortiz says.

Amber was given nitric oxide, a treatment that Odessa Regional Hospital implemented last year for premature babies with hypoxic respiratory failure. Administered through a ventilator, the nitric oxide relaxes pulmonary blood vessels and allows for better blood flow through the lungs and improved oxygenation. Within days, Amber's health

had improved dramatically.

"This treatment is one of the best ever invented for newborn care," says Dr. Sanjay Patel, medical director of the NICU at Odessa Regional. Dr. Patel first learned of the treatment, which the FDA approved in 1997, during a fellowship at UCLA. When he came to Odessa in January 2004, implementing the nitric oxide treatment there was one of his first priorities. Odessa Regional was the first hospital in the area to offer this treatment and the first IASIS hospital to use nitric oxide for newborns. Dr. Patel hopes to implement it at Southwest General Hospital soon.

Before the benefits of nitric oxide treatment were discovered, babies with respiratory failure had to be placed on extra corporeal life support, an extremely traumatic procedure that involves putting a tube through the baby's neck.

"Without nitric, these babies are very hard to take care of," Dr. Patel says. "They used to have to endure a very invasive procedure."

The nitric oxide treatment is approved for babies who are at 35 weeks and above, and who do not have complex congenital heart disease or other life-threatening anomalies. Treatment generally lasts three to five days, and results are visible as soon as six hours after treatment begins.

Amber is one of eight babies who have received nitric oxide treatment at Odessa Regional.

"Right away, they said it was working for Amber," Ortiz says. "She still had some problems, but at least she was able to

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The Odessa Regional NICU

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breathe and her lungs got better.”

Learning to Eat

Once her health improved, Amber faced another challenge that many preemies have: learning to eat. Luckily, a new partnership between Odessa

Regional and Permian Basin Rehabilitation Center (PBRC) brings speech pathologists into the NICU everyday to work with the babies.

“Small premature babies often have a lot of problems with motor coordination and sucking, and speech therapists are trained to help with that

problem,” Dr. Patel says.

While preemies are monitored 24/7 and nurses make sure they’re receiving the proper amount of nutrition, it’s vital that the babies learn how to do the work of feeding themselves. With their specialized knowledge of the muscle structure of the mouth and throat,

Home Away From Home



Sleep rooms help new parents prepare to care for their special newborns at home

The moment when parents are told they can bring their baby home from the NICU is usually filled with great joy ...and sometimes, a bit of fear. Parents of NICU babies often grow very close to the hospital staff that they’ve trusted to help their babies through the difficult early days of life. And many parents worry about whether they can care for their still-delicate baby without the security of a highly-trained medical staff nearby.

At IASIS hospitals with NICUs, parent sleep rooms help these families build the confidence they need to take their babies



speech pathologists are ideally suited to help the babies learn this important skill.

“Full-term babies know to suck, swallow, and rest,” says PBRC’s director, Kathryn Hollmann, who starts her morning five days a week with the babies at Odessa Regional’s NICU. “Preemies just keep sucking and don’t stop to

swallow. That’s what we’re trying to teach them. Eventually, they get the pattern and it’s a motor memory.”

Time for Feeding

Babies typically develop the muscles to suck, swallow and breathe at about 32 weeks. But, the muscles are sometimes

weak at first, so it can be a challenge for the baby. Hollmann begins by putting these small babies in a position that subconsciously communicates to them that it’s time for feeding. “When a baby’s hands are placed by the face, the baby understands that’s where the action is going to be,” she says.

It’s important that the babies learn that eating is a pleasurable experience, or they won’t want to feed. “When they’re getting it, you can feel the baby’s whole body relax,” she says.

Hollmann generally works with each baby for about two weeks. When she’s done, most are able to go home from the hospital before 40 weeks, and without a feeding tube, which is good news for the family. “You just want to get them successful at feeding, so they can go home to their mothers,” she says.

The combination of the nitric oxide treatment and the partnership with speech pathologists has shortened the average length of stay for a preemie in the NICU by five days.

“This year we have taken care of 56 babies who were less than 1,500 grams — the most in Odessa Regional’s history,” Dr. Patel says. “And still our patient length of stay is reduced. That’s a big achievement, and we’re very proud of the work we’re doing to help these babies develop so they can go on to have healthy lives.”

home. For one to three nights before a baby that has spent several weeks in the NICU is discharged, the mother, father and baby move into their own room in the unit, where they can make the transition from hospital to home. These rooms are comfortably designed for family bonding.

“We’re often working with young and inexperienced parents,” says Catherine Abshire, director of the NICU at The Medical Center of Southeast Texas. “They’re scared to take home a baby who has special needs or who only weighs five pounds. When we spend a few days helping them learn to take care of the baby on their own, it reduces the anxiety level dramatically.”

Before leaving, parents learn the basics of baby care, such as proper feeding and bathing techniques, as well

as any special procedures for their child. If the newborn will be going home with oxygen, then the equipment in the room will be the same setup that they will bring home. If the baby has medication needs, the parents will get accustomed to administering it properly.

“Some of the parents who use our sleep room tell us they didn’t get any sleep on the first night because they were so worried that they wouldn’t be able to handle it,” says Kathy Dean, head nurse at the Davis Hospital NICU. “But that’s why we have the room. When the family goes home, the parents feel more confident. We’ve heard back from so many of them that those nights in the sleep room made a big difference and really helped them once they were home.”