

# News

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\*\*\*New Pediatric Trauma Center  
combines state-of-the-art treatment  
with research.

DALLAS--"I knew he was dead," says Bonnie Gilbert of Arlington, Texas, about her 11-year-old son who was struck by lightning. But Nicky is alive and wonders why he recieved so much special attention.

Nicky had been playing soccer when he was struck in the head by a bolt of lightning, April 7, 1984. He is one of the few people to ever survive such a grievous injury and is on the road to recovery thanks to prompt action by a UT Southwestern medical student and the specialized care available in a new unique pediatric trauma intensive care unit.

Gilbert says, "I just knew he was dead and wasn't going to make it. I saw him when he was dead. He wasn't breathing and his eyes were staring."

Avril Rush, a fourth-year medical student, was watching her daughter play on a nearby soccer field. "I was about 50 feet away from him when he was struck. It blew him quite a distance up into the air. And I was knocked down by the concussion. It was like 'boom' and hitting a brick wall.

"We started CPR (cardiopulmonary resuscitation) immediately."

Nicky was taken to Parkland Memorial Hospital where he became the first patient to be treated in the newly opened Pediatric Trauma Center. This special care facility is the first in nation that combines intensive care treatment, trauma research and medical education. And it is one of the few in the country designed solely for treating severely injured children.

The intense electric jolt stopped Nicky's heart, says Dr. Dale Coln, chairman of Pediatric Surgery at The University of Texas Health Science Center at Dallas and medical director of the Pediatric Trauma Center. Nicky was unconscious and unresponsive during his first days at the trauma center. But state-of-the-art medical technology, combined with the research resources available at the medical school enables physicians to break new ground in treating patients such as Nicky and other severely injured children up to 14 years old.

The lightning blast burned deep portions of Nicky's brain tissue. "With the proper care we were able to successfully get him through the period of coma," says Coln. "Early efforts were made to decrease the swelling in the brain."

One method the physicians used was to maintain Nicky's comatose state with medication. The idea was to bring Nicky out of his unconscious state in a slow, controlled manner, much in the same way a scuba diver surfaces at a slow, steady rate to avoid the bends.

The 10-bed center that was Nicky's Parkland home is under the direction of the Division of Pediatric Surgery at The University of Texas Health Science Center at Dallas. Parkland is its major teaching hospital.

Medical equipment designed particularly for children is used in the Parkland center. Physicians treating the children come from a broad spectrum of medical specialties at the health science center including pediatrics, surgery, neurology, radiology and psychiatry.

The center is staffed by nurses drawn from all areas of the hospital. One-to-one nursing care is provided for the critically injured children. For acute care beds there is one nurse for every two patients. Nurses were selected for their skill in caring for critically injured patients and their ability to ease the emotional trauma that a youngster experiences in a hospital setting.

The collective expertise and specialized facilities in the Pediatric Trauma Center create an environment particularly suited for research, says Coln. The experience gained treating Nicky and other young trauma victims will enable physicians to perfect new ways of caring for the seriously injured child.

"We're going to learn a tremendous amount about taking care of children simply from the day-to-day care," says Coln. "Having all these children in one area, we can learn a lot about rehabilitation as well as what is best as far as early treatment is concerned. We hope to gain new information about treatment of children with head injuries and the nutritional aspects of recovery from serious injuries. We're also interested in collating the multitude of diagnostic tests that are available to determine which of those are going to give the best results and be the most cost effective."

(over)

Trauma is the nation's major killer of children. Coln says half of childhood injuries are the result of automobile accidents and comprise the majority of admissions in the center. Other types of injuries to be treated result from falls, child abuse and an occasional gunshot wound.

He says if parents would simply use an automobile safety seat for their children a major cause of death and injury can be reduced. "I think you have to regard restraining children as insurance. It is protection against not your bad driving, but the bad driving of other people. While you have taken 100 trips to the grocery store with your infant, it requires just one mishap and you have lost that baby."

Coln says there is a lack of knowledge about how to treat the young trauma victim. "We're simply scratching the surface as far as what is the best method of taking care of injured children. Trauma care in this country lags behind care in other areas such as cancer and heart disease. And this is especially true as far as kids are concerned.

"By having the children with trauma injuries in one center you can learn a lot because it takes you less time to gain the necessary experience in looking after them. Then that information can go out to the medical community."

The center does, in fact, serve as an information resource. It gathers demographic and treatment data, sponsors seminars and outreach educational programs and serves as a public information source for identification and elimination of known hazards for children.

A major educational role is serving as a teaching facility for medical residents, physicians, nurses and other medical professionals specializing in pediatric trauma.

Coln notes that other specialized facilities have led to past medical advances. He cites burn treatment centers and neonatal intensive care units as two examples of how concentrated care and research efforts have resulted in dramatic new methods of saving lives.

The Pediatric Trauma Center also strives to meet the unique emotional needs of an injured child, says the surgeon. The physical design of the center was planned for the child in mind. The center is decorated with bright colors, lots of light from many windows and appropriate artwork on the walls.

Coln says, "The noise level is kept low and the monitoring equipment is very quiet. It's an atmosphere that is conducive to the psychological well-being of the child without comprising his or her medical needs."

Imagine what it must be like for an injured child to wake up in a noisy, crowded adult intensive care unit that resembles a scene from "MASH," Coln points out. "Children tend to withdraw when they are severely injured. We try to lessen the psychological impact.

"The staff is very kind, sensitive, compassionate and competent. We do not have restricted visiting hours. Unless there is a crisis situation, we encourage the parents to spend as much time as possible with their child. The staff brings coffee and doughnuts to the parents, and there is a lot of communication with the parents and a lot of emotional support given."

Initial funding for the Pediatric Trauma Center was provided by the 1982 Crystal Charity Ball, which raised \$367,000 for the center. Dr. Ron J. Anderson, chief executive officer of Parkland and associate professor of Internal Medicine at the health science center, says private philanthropy will continue to be necessary.

Gilbert is thankful that the Pediatric Trauma Center was ready for her son. "I feel like we had the best when we needed it. Everyone was so good to us. They didn't keep anything from us, they told us exactly what was going on. I was allowed to be with Nicky all the time."

Nicky has no recollection of being struck by lightning nor of his hospital stay. Young Nicky was in a coma for 13 days. Three weeks following the accident, he was moved to a rehabilitation facility where he spent another five weeks. Today Nicky is home and is undergoing outpatient therapy for residual speech and coordination problems. According to Gilbert, the lightning blast damaged Nicky's hearing, which may account for his speech difficulties.

Gilbert says her son has lost about 30 pounds since the injury. Nicky has some trouble controlling his left arm and leg. "His left leg rather drags and he turns his foot in when he walks."

But Nicky's mother is encouraged by the progress Nicky has made: "I think he is doing wonderfully. Initially it was just wait and see. His doctors are amazed and pleased at the progress he has made. They tell me -- and have from the very beginning -- that with brain injury there is nothing they can predict." She hopes Nicky will return to his neighborhood school for the sixth grade this fall.

The medical student who helped Nicky has graduated and is now in UT Southwestern's family practice residency program at John Peter Smith Hospital in Fort Worth, Texas. Rush says Nicky will always be a special person to her.

"I really met him the other night for the first time, at his house. Nicky was thoroughly alert, walking around and making jokes. My first thought was 'What a neat kid this is.'"

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