

Baby born without a heartbeat, but her medical team was delivering a miracle

May 17 2011



Christy Strobel arrived at Arnot Ogden Medical Center to be induced into labor on April 14, 2010. But when she was hooked up to the monitors, all plans changed and Christy was rushed into the operating room for an emergency c-section. Mike, her husband and Elmira radio personality, didn't even make it into the room in time to see his daughter's arrival.

“She wasn't breathing and she wasn't crying,” Christy said. “I remember looking up at Mike and not hearing her crying. No one said anything.”

Christy thought Lauren was dead.

Meanwhile, Arnot Ogden physicians and nurses were working hard to revive the 9 1/2-pound baby who was more than a week overdue. Lauren's APGAR score, which assesses a newborn's condition and ranges from 0 to 10, was 0 at birth. She had no heart beat and took no breaths. Despite chest compressions and being intubated to force air into her lungs, at 5 minutes, she was still 0. No heart beat. No breaths. They gave her epinephrine to kick-start her heart and continued compressions and breathing for her. At 10 minutes, she was still at 0. At 15, 0.

Finally, after 18 minutes, there was a faint and very slow heartbeat. It wasn't normal, but it was something to work with. Often, resuscitation is stopped at 20 minutes when there's no improvement, but something told the Arnot Ogden team to keep going. By 22 minutes, Lauren had a regular heartbeat, but she still wasn't breathing.

The team came to Christy and Mike and told them Lauren needed to get to Golisano Children's Hospital at the University of Rochester Medical Center now. She needed the specialists there.

Christy was pushed in a wheelchair to see her first-born child in the Neonatal Intensive Care Unit (NICU) before Lauren was taken by ambulance to Rochester. The seriousness of the situation was weighing on Christy. She wanted to go with Lauren, but she had just had major surgery and couldn't be discharged. Her obstetrician, who always has a very calm and professional demeanor, came into the NICU, hugged Christy and started crying.

Christy had to go back to her room, while Mike rushed to Rochester to be with their daughter. Christy's mother stayed with her to help her get discharged from the maternity ward as quickly as possible.

"I was hearing all these [babies](#) cry, and my baby was not there," Christy said. "You just never realize... you never think this is going to happen."

When Lauren arrived in the NICU at Golisano Children’s Hospital, she was immediately placed on a cooling blanket. Arnot Ogden and the transport team had allowed Lauren to stay cool in anticipation of her need for cooling therapy when she arrived at the hospital. Babies whose brains and other organs have been deprived of oxygen during birth may do better when they are kept at 93.2 degrees Fahrenheit for 72 hours if this is started within the first 6 hours after birth.

Ronnie Guillet, M.D., Ph.D., a neonatologist and professor of Pediatrics at Golisano Children’s Hospital, helped the hospital become the first in upstate New York to make cooling therapy a standard therapy for babies like Lauren. She was also Lauren’s physician when she arrived. Shortly after Lauren was settled into the NICU, on a cooling blanket and on a ventilator to breathe for her, she had an EEG, a test that measures brain activity.

“It couldn’t have been any worse unless there was no activity at all,” Guillet said.

Lauren’s EEG showed what is called a “burst suppression” pattern. There were periods of no activity and then bursts of activity. But the inactive periods were long and the bursts were very short. She didn’t even respond to pain.

This news hit Christy hard in her hospital room in Arnot Ogden. “I assumed she was gone, and she was just sort of holding on.”

The next morning could not come fast enough for the new mother. Christy pushed her providers to get out of the hospital and she and her mother made a beeline for Rochester. Christy’s grandfather had died before she was born, and she always associated him with rainbows. About 10 minutes into the drive, she saw a rainbow and felt her grandfather’s presence.

“It was very odd because it was completely cloudy. There was this calming force that went over me, and I felt like everything would be OK,” Christy said.

Lauren’s survival was still very iffy. Her lack of normal brain activity and the fact that she didn’t have a normal [heartbeat](#) for 22 minutes prompted the medical team to have a very painful conversation with the family.

Guillet explained to the family that even if Lauren was able to start breathing on her own, it was very possible she would never sit up or speak. She was without oxygen for a very long time, and she might need total care for the rest of her life. Did the family agree that it would be in Lauren’s best interest not to resuscitate her if her heart stopped again? Did they feel that it would be in her best interest to stop providing aggressive treatment and instead keep her comfortable until she died?

Lauren was very bloated because of all the fluids she needed pumped into her. She had a half dozen machines hooked up to her, helping her breathe, keeping her cool, monitoring her heart, her oxygen, her temperature. Mike and Christy couldn’t touch her because it was too much stress on her.

“I didn’t get to see her eyes,” Christy said. “They were always closed. It was just... a very grave situation.”

They decided to keep going and to resuscitate Lauren, if she needed it. They sat next to her and told her all about her room at home. They told her about her puppies. Read her books. But she didn’t react to any of it.

On Lauren’s 5th day of life, Mike and Christy were about to leave for the Ronald McDonald House to rest when she opened her eyes to look at her parents.

“She looked right at me,” Christy said. “It was so wild to see her react. It was so moving.”

That night, everything changed. From that moment on, Lauren improved. She worked her way off the ventilator. She started eating, although much of that was through a tube snaked down her nose into her stomach (NG tube). Her EEG at about a week old wasn’t much better than her first one, but that didn’t stop her or her parents from forging ahead. Lauren started breathing on her own and was able to wean off the ventilator.

On her 9th day of life, Lauren’s EEG was much improved.

“She went from practically brain dead to being near normal. We all went from thinking she was gone to, ‘She’s going to be OK,’” Christy said.

While that was an incredible achievement, Lauren still wasn’t drinking from a bottle well. Christy didn’t want Lauren to have a tube surgically placed into her stomach. She was determined to get Lauren eating normally or at least getting enough through the NG tube.

At 3-weeks-and-3-days-old, Lauren went home with her family, still taking food through the tube and her brain function still somewhat in question, but she was breathing on her own and responding to her parents.

“I believed in her. I thought if I could get her home and really work with her that I could get her feeding. She was so strong and I could be strong, too,” Christy said. She said Lauren was likely to have some disabilities but that she would work just as hard to get Lauren all the help she needed.

Three days after getting home, Lauren didn’t need her NG tube anymore.

Christy enlisted the help of early intervention services, but Lauren started meeting every developmental milestone quickly. At her 6-month-old follow up at Golisano Children’s Hospital, her physician said Lauren didn’t need to come back. Christy called Guillet down to see Lauren, and she was delighted to see her former patient doing so incredibly well.

“I would never have predicted this,” Guillet said. “It’s a testament to what cooling therapy can do, but also, what a family and child can accomplish with hard work and determination.”

Provided by University of Rochester Medical Center

Citation: Baby born without a heartbeat, but her medical team was delivering a miracle (2011, May 17) retrieved 27 April 2024 from <https://medicalxpress.com/news/2011-05-baby-born-heartbeat-medical-team.html>

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