

Shaken Baby Syndrome

Statewide task force educating parents & clinicians

As new parents, we've all been there: Our infant cries and cries, sometimes inconsolably. As the primary caretaker, we believe we should know what to do. When nothing works, frustration levels rise. Most of us chalk it up to inexperience as parents.

But in a few tragic cases, the baby becomes the victim. It's called Shaken Baby Syndrome (SBS), a medical term used to describe injuries resulting from shaking an infant or young child to the point that neurological changes occur. These changes are due to destruction of cells secondary to trauma, lack of oxygen to brain cells, and swelling of the brain. Body bruising and fractures may also occur, however, there is often no external evidence of trauma on the head or body, making diagnosis more difficult.

According to the National Center on SBS, approximately 20 percent of cases are fatal in the first few days after injury. Survivors are left with handicaps ranging from mild learning disorders to permanent vegetative states.

How much shaking is required for this type damage is not clear, but studies indicate as little as five to ten seconds can cause trauma.

Long-range statistical evidence is not yet available to determine how often SBS occurs, but a North Carolina research project published in the *Journal of the American Medical Association* in August, 2003, indicated approximately 1300 children nationwide experience severe head trauma every year, with another 100,000 children under the age of one suffering non-accidental brain injuries.

Dr. Cynthia J. Brown, founder of the Mountain Child Medical Evaluations Program of Mission Children's Clinic, thinks even one child who is the victim of SBS is one too many. In an article she wrote titled "The Hardest Job You'll Ever Love," Brown says crying is normal behavior for infants and that most babies will have some periods of inconsolable crying.

Brown has spent most of her career working to help prevent child abuse in all of its forms. She is one of several pedi-

atric specialists who are members of the nonprofit

Prevent Child Abuse North Carolina (PCAN-NC) composed of partners including Mission Hospitals. In addition, she serves on a statewide task force that includes state agencies and child advocacy groups that work on SBS prevention projects. Among them is a project called "Period of Purple Crying: Keeping Babies Safe in North Carolina."



Cynthia Brown, MD
Mission Children's Clinic

"Babies will begin to cry around three weeks of age," she says, "usually peaking at six to eight weeks. Some will cry for hours each day and some not as much, but all typically follow the same pattern of peaking at six to eight weeks, then diminishing thereafter. This means that no matter what comfort measures are tried, the baby will continue to cry."

She says while there are comfort measures for parents to try, they still need to understand that sometimes these measures will work; sometimes not.

"When comfort measures don't work, we call that inconsolable crying," she says, "and thankfully, it gradually goes away."

Brown also points out that even though bringing a new infant home is one of life's greatest joys, there is a reality that coping with a newborn's demands, from chronic cries to never-ending diaper changes, is exhausting and exasperating. And for a few caretakers unable to tolerate the frustration, violence can follow.

Medical staff can easily miss a diagnosis of SBS, Brown adds, because the symptoms are subtle.

"With no clear signs of injury, it can be mistaken for a mild to moderate illness," she says. "But when it happens, it is devastating to see a child end up in ICU and parents grieving from that one moment when they didn't know what to

do. It is not enough to tell them not to shake a baby. We have to make them understand that infant crying is normal."

Mission Hospitals' partners in a statewide Task Force called Gaining Ground Initiative funded by the Duke Endowment to identify and implement statewide strategies that can reduce all child maltreatment. The hospital also utilizes a new prevention program through the National Center on Shaken Baby Syndrome: The Period of PURPLE Crying®, providing DVDs and other resources as preventive measures. This prevention effort and the outcome follow-up studies are funded by the Duke Endowment, Doris Duke Foundation, and the Centers for Disease Control.

Parents and caretakers who have children with SBS are shown a video and given information that explains the dangers of SBS. Nurses in the Mother-Baby Unit, Neonatal Intensive Unit, and Pediatric Units, considered key players, are encouraged to spread the prevention message.

"Because of the positive relationships nurses tend to have with families they care for at Mission, we hope the information we provide gains legitimacy and will change behaviors," Brown says.

As a result of these endeavors, Gail Harris, director of the Mother-Baby Unit at Mission, says an ad hoc committee was formed within the hospital to continue education not only for parents and other infant caretakers, but among the hospital's medical staff as well. A statewide conference on child abuse and neglect is scheduled in Winston-Salem on March 17-18, 2008. Visit www.preventchildabusenc.org for more information.

"We are currently re-evaluating our program in an effort to decrease the SBS population," she explains. "We also plan to diversify more in 2008, providing an educational DVD in Spanish and other languages. We want to make it clear that babies will cry and that you might feel helpless. But there are helpful tips on what to do, including the message that letting a baby cry is sometimes okay."

— Marie Bartlett