



NEURO
INSTITUTE

Continuing Education for Rehabilitation Professionals



Shaken Baby Syndrome (SBS)

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Objectives

- **Define the meaning of Shaken Baby Syndrome**
- **Identify symptoms of Shaken Baby Syndrome**
- **Describe complications of Shaken Baby Syndrome**
- **Identify prevention strategies to prevent Shaken Baby Syndrome (SBS)**

What is Shaken Baby Syndrome (SBS)

According to the Mayo Clinic (2018) Shaken baby syndrome (SBS) is a traumatic brain injury that occurs when a infant or toddler is forcibly shaken thus resulting in decrease oxygen flow to the brain. Shaken baby syndrome is also known as abusive head trauma, shaken impact syndrome, inflicted head injury or whiplash shake syndrome.

It is estimated that 1,000-3,000 children in the United States suffer from SBS each year. (NY Department of Health, 2010).

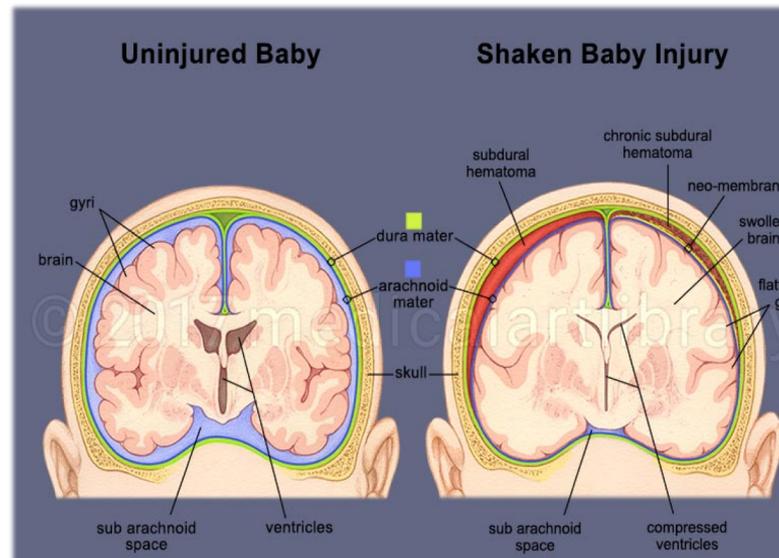
Damage caused when a baby is shaken

Babies are especially susceptible to injury when they are shaken because their connecting tissues and bone structure have not sufficiently developed to offer any protection.



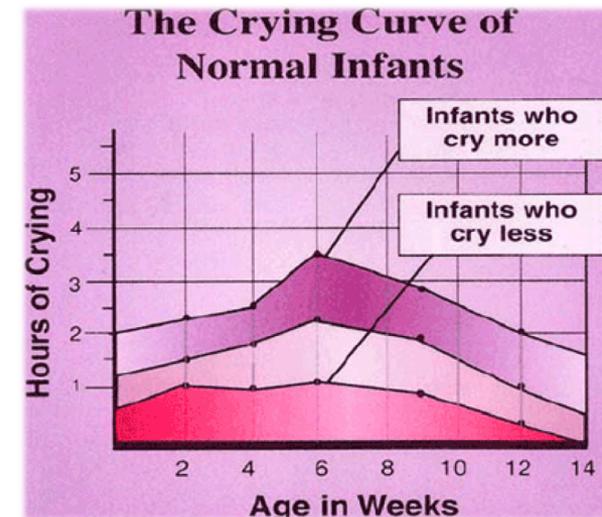
What Happens to the Brain?

- Since infants and toddler do not have strong neck muscles, when shaken, their brain bounces around in their head and the force and impact of the brain against the skull causes damage . The movement of the brain, when forcibly shaken, causes blood vessels to tear and thus resulting in a brain bleed or subdural hemorrhage.
- What is a brain bleed or subdural hemorrhaging? This occurs when blood pools into the space between the brain and skull.
- SBS can also case the baby's brain to swell from the traumatic force. With swelling of the brain, the brain is no longer small enough to fit inside the skull which results in compression of the brain and disrupted blood supply to the brain.



The Truth of the Causes of SBS

- Infants or toddlers do not suffer SBS by accident, it is considered a Non-accidental Trauma (NAT). True accidents that occur by falling from a short distance, playing, bouncing a baby on your knee or accidental handling of a baby, does not result in SBS.
- According to the Mayo Clinic (2018) and The National Centers for Shaken Baby Syndrome (n.d.), here are the causes behind SBS:
 - Unrealistic expectations of babies
 - Young or single parenthood
 - Stress
 - Domestic violence
 - Alcohol or substance abuse
 - Unstable family situations
 - Depression
 - A history of mistreatment as a child



The number one reason for SBS is that the baby won't stop crying.

How Can SBS Be Identified

- SBS can be identified by various changes in behavior of the infant or toddler and also can be identified utilizing diagnostic procedures. Mayo Clinic (2018) identifies these **behavioral** changes as being relevant in the identification of SBS:
 - Extreme fussiness or irritability
 - Difficulty staying awake
 - Breathing problems
 - Poor eating
 - Vomiting
 - Pale or bluish skin
 - Seizures
 - Paralysis
 - Coma

Outward signs of injuries may not be visible but bruising may appear around the eyes and face.

MRI or CT scan can be used in identifying SBS diagnostically.

Complications of SBS

- Mayo Clinic (2018) and the National Center on Shaken Baby Syndrome (n.d.) identified these complications as a result of SBS. Also note that appearance of some of these complications may not be immediate but can occur over a period of time.
 - Partial or total blindness
 - Developmental delays, learning problems or behavior issues
 - Intellectual disability
 - Seizure disorders
 - Cerebral palsy
 - Death
 - Long bone fractures
 - Rib fractures
 - Other of unknown etiology

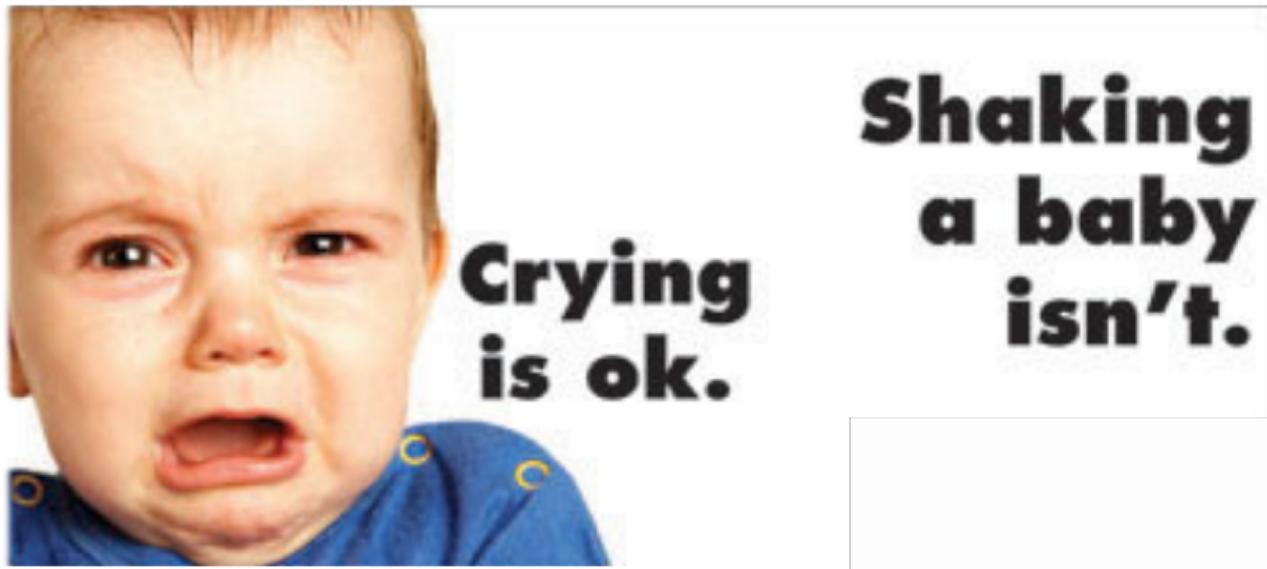
Prevention of SBS

- Community identification of SBS can help support the prevention of SBS. Healthcare providers can also identify during doctor visits the coping ability of parents as well as offering alternative soothing methods for infants.
- It is important to first identify why your infant is crying as the remedy can be as easy as changing a diaper.
- According to the State of Washington Department of Children, Youth, and Families (2005), here are some tips to provide to parents or responsible parties, to help in the prevention of SBS:
 - Breathe. Take some deep breaths to help reduce feelings of anger and tension.
 - The 10-foot rule. Place your baby in a safe place and walk 10 feet away until you have calmed down.
 - Take a break. Gently lay your baby down on her back in a safe place and take a break.
 - Talk to someone. Call a friend or a relative who will listen and be caring. It can help to share your thoughts and feelings.
 - Go for a walk with your baby. A simple walk around the block can help calm both you and your baby.
 - Talk with your pediatrician about your baby’s crying. Even a “colicky” baby is normal but you may need extra support.
 - Respite care for families with medically fragile infants or toddlers.

Conclusion

- SBS is a Non-accidental Trauma that occurs generally when a parent or caregiver is stressed due to an infant's constant crying. SBS can result in life-long developmental disabilities up to and including death.
- SBS has impacted the financial stability of the health care community by requiring the child to be placed in long-term care facilities and multiple subsequent hospitalizations due to the long-term effects of their injury.
- School systems are impacted by the need to provide developmental and healthcare support in the classroom setting.

SBS is PREVENTABLE



References

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Comments/Questions



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