



New York Passes New SBS Law

Hospitals Now Required To Provide Shaken Baby Syndrome Information To New Parents

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After learning about a highly successful shaken baby syndrome prevention effort at Children's Hospital of Buffalo, Assemblyman Sam Hoyt introduced a bill requiring all New York hospitals to provide SBS information to all new parents regarding the causes and consequences of shaken baby syndrome and how it can be prevented.

On July 25, 2001, the New York State Legislature sent the bill to Governor George Pataki. It was signed into law by the Governor as Section 2803-j of the Public Health Law and became effective October 6, 2001. The law provides that SBS information must now be added to an already existing general information brochure received by all new parents.

The law reads as follows:

1-c. The informational leaflet shall also include a description of the dangers of shaking infants and young children. The description shall include information of the effect of shaking infants and young children, appropriate ways to manage the causes of shaking infants and young children, and discussion on how to reduce the risks of shaking infants and young children.

Assemblyman Hoyt, whose district includes portions of Buffalo, New York, first sponsored the bill in 1998 and then again in 2001 after becoming aware of a program developed at Children's Hospital of Buffalo by Mark Dias, M.D. Dr. Dias' hospital program presents education to new parents about the dangers of shaken baby syndrome through the use of "Portrait of Promise," an 11-minute video, an SBS educational brochure and a 5 to 10 minute discussion with a nurse on staff.

The Dias program seeks to ensure that parents of newborn children actually receive the information they need to protect their child against shaking injuries at a time when they are most receptive to the information. During the post-delivery stay in the hospital, a maternity nurse introduces the videotape, provides the SBS brochure and returns to answer questions and obtain an acknowledgment/evaluation form signed by the parents. To provide information on the retention of the materials, the Project collects information from follow up calls to the parents six months after discharge.

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First Australian SBS Conference: Highly Attended, Highly Rated

Karen Coleman
National Center on Shaken Baby Syndrome

With conference attendees from 12 countries, it was often standing room only at the National Australian Conference on Shaken Baby Syndrome. Sponsored by the National Center on Shaken Baby Syndrome, the Children's Hospital at Westmead and Sydney Children's Hospital, the conference was held September 3-4, 2001, in Sydney.

Conference workshops focused on medical, legal, research and prevention aspects of shaken baby syndrome. Specific workshops included, SBS: An Investigator's Perspective; Vaccination controversy in SBS; Dad's 101: A Training Program for New and Expecting Fathers; Keys to Successful Prosecution of SBS Cases.

Dr. Ron Barr, Professor of Pediatrics and Psychiatry, McGill University, presented The Crying Challenge: Characteristics of Early Crying that May Stimulate Shaking. In this workshop, he presented his theory of the Period of Purple Crying, describing crying tendencies in infants.

Each conference workshop was highly attended and received outstanding marks from participants.

"Very informative, well organized. Helpful information to pass on when educating the parents and care givers we serve," said one conference attendee.

Other comments, "Exceptional, exceptional workshops. Best legal and medical explanation of SBS that I have ever attended." "What great programs with information for dads, doctors and legal workers."

Conference Directors, Marilyn Sandberg, National Center on Shaken Baby Syndrome, Dr. Michael Ryan, The Children's Hospital at Westmead and Dr. Kieran Moran, Sydney Children's Hospital, were impressed with the enthusiasm of participants and attention the conference drew.

"It was a dream of Michael Ryan's to bring this SBS conference to Australia, and I am pleased to see his dream realized," Marilyn Sandberg said. "It was a pleasure to work with Dr. Ryan and Dr. Moran, as well as with the outstanding members of the Australia conference planning committee."

Due to a recent high-profile case in London in which an Australian nanny shook a 6-month-old child to death, Australian officials have been very focused on SBS. They have conducted educational campaigns in the past, but many think this much publicized case has had a great effect on educating the general public about the dangers of shaking an infant.

"The media appetite for this story was incredible and probably did more than anything to raise the public consciousness," said Detective Chief Inspector

Philip Wheeler, who led the investigation of this case.

Participants at the conference included professionals from medical, legal, investigation and social work fields. Also in attendance were many victim's family members. The conference received a great deal of press coverage, both in the largest newspapers and on the top t.v. news programs.

A second National Australian Conference on Shaken Baby Syndrome is already in the planning stages, tentatively scheduled for March, 2004.

Available Now

Conference proceedings from the National Australian Conference on Shaken Baby Syndrome include the following:

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Fourth National Conference on Shaken Baby Syndrome Approaches

Teresa Brechlin
National Center on Shaken Baby Syndrome

The National Center on Shaken Baby Syndrome is pleased to announce The Fourth National Conference on Shaken Baby Syndrome, September 15-18, 2002, at the Little America Hotel and Towers in Salt Lake City, Utah.

The conference provides participants with educational, networking and social opportunities. Following is a brief overview of several conference activities taking place at, and in conjunction with, the conference.

Sunday, September 15

The following pre-conference institutes will be held prior to the conference, running simultaneously from 10 a.m. to 4 p.m.:

- Global Issues in SBS
- Misuse of Medical Literature in Court
- Prevention of SBS
- Review of the Military's Response to SBS

The conference begins at 6 p.m. The opening address, *On the Theory and Practice of Shaking Infants: Where Have We Come in the Thirty Years Since Caffey Identified Shaken Baby Syndrome?*, given by Dr. Carole Jenny, will encompass the advancements and progress of SBS identification, diagnosis, prevention, treatment, investigation and prosecution.

Monday, September 16

The morning general session will be a panel of experts who were involved in a famous shaken baby case in England,

wherein an Australian nanny was prosecuted for the shaking death of an infant in her care.

Anatomy of a Shaken Baby Murder Case: The Prosecution of Australian Nanny Louise Sullivan will feature the investigators, prosecutor and pathologist involved in the case.

A networking and social event will be held Monday evening. This is your chance to relax, enjoy some good food, dance and network with the top professionals in the field of SBS.

Tuesday, September 17

A family panel will be held for Tuesday morning's general session. As in years before, this panel consists of dynamic family members who share their story of shaken baby syndrome.

Wednesday, September 18

Following the conclusion of the conference, the one-day legal institute will make a return on Wednesday. In response to the need for more comprehensive information on investigating and prosecuting SBS, a legal institute premiered at the Third National Conference in 2000. The Legal Institute is a must for professionals working with SBS for insight into the justice system.

For more information on the conference please visit the website of the National Center on Shaken Baby Syndrome at www.dontshake.com or contact Teresa Brechlin, Conference Coordinator at (801)627-3399 or by email at tbrechlin@mindspring.com.



Animal Models for Shaken Baby Syndrome

Ethical Testing Yields Valuable Insight To The Nature Of The Eye And Brain Injuries In SBS Cases

Alex V. Levin, MD, MHSc, FAAP, FAAO, FRCSC
Department of Ophthalmology
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Developing animal models for human disease allows for investigations which otherwise might not be possible in human subjects. As a result, animal models may yield new insights into the human condition that can then be used for improvements in diagnosis and treatment. However, it is important always to remember the rights of animals to be spared unnecessary pain and suffering. This goal can be achieved by Research Ethics Board monitoring to ensure that particular research endeavours are well designed and worthwhile. In addition, judicious use of analgesia and anaesthesia should be considered.

Some work has previously been done using animals as models for human head injury, including acceleration-deceleration/whiplash trauma. The majority of this earlier work, some of which involved primates, was designed to understand the types of acceleration-deceleration exposures that human beings might be exposed to as a result of motor vehicle accidents or jet pilot military maneuvers. Much of this research has been abandoned in recent years with the recognition of animal rights and ethics.

More recently, experiments have been conducted that involve the mechanical shaking of anaesthetized rats in canisters to induce diffuse axonal injury. In

one study, the rats were then given different pharmacological agents to see if brain damage could be prevented or lessened.

To my knowledge, no previous work has specifically been done to look at the ocular effects of shaking/acceleration-deceleration on animals. The eyes of the animals mentioned above were not examined.

A stretch model of the guinea pig optic nerve has been published and may have some applicability to the orbital injury proposed for shaken baby syndrome.

As suggested by Dr. Randall Alexander, the woodpecker offers a potential natural model for protective mechanisms that allow adaptation to shaking-impact. These birds spend virtually their entire lives undergoing extreme acceleration-deceleration exposure with significant head impact. Yet, one rarely sees brain damaged or blind woodpeckers flying around! How is it that these birds survive these forces?

Some work has been done analyzing the protective adaptations of their skull and surrounding muscles to cushion the brain. More specifically, we have conducted dissections of woodpeckers which have succumbed to natural death. Remarkably, these birds differ from human children in that the eye-

ball cannot move within the orbit and the sclera is reinforced by bone and cartilage.

These findings might allow us to infer that babies are particularly vulnerable to shaking damage in the eyes as a result of the ability of their globes to move within the orbit and due to the well recognized extreme pliability of the infant sclera. Likewise, the woodpecker retina tangential to the plane of impact and the vitreous is not adherent to the posterior retina. In infant victims of SBS, traumatic retinoschisis occurs due to shaking of the vitreous which is attached to the posterior retina that lies perpendicular to the anterior-posterior plane. These findings in woodpeckers support clinical research that has been done analyzing various findings in shaken babies.

Future studies on woodpeckers might involve the surgical ablation of these presumed adaptive mechanisms on live woodpeckers and then returning them to live captivity to examine whether or not ocular injury results when natural pecking behaviour is resumed. In addition, we plan to continue our dissection work on freshly euthanized woodpeckers to better understand the vitreous-retina relationships as well as the vitreous consistency, findings that are difficult to interpret on formalin fixed specimens.

Unfortunately, woodpeckers are difficult to maintain in captivity. In addition, they do not have retinal blood vessels so they can not be used to model retinal hemorrhages. Rather the focus of woodpecker work must be on protection from mechanical shearing of the retina.

Another line of understanding the retinal findings in SBS may come from repeating the rat shaking experiments. The eyes of rats could be examined after the mechanical shaking has been completed. This would allow for a multitude of variables to be altered thus yielding data on force thresholds, force types, and anatomical relations.

Using the guinea pig optic nerve stretch model may also yield further insight into our ongoing postmortem studies on SBS victims looking at diffuse axonal injury in the optic nerve. Once again, there will be difficulties in generalizing findings in these small animals to humans. To help resolve this controversy, one would have to consider larger mammal models. For example, ground hogs are often shaken to death by dogs. Specimens of this sort would be very useful and we would welcome such material for further study.

Animals may yield valuable insight to the nature of the eye and brain injuries in human shaken baby syndrome. Natural models such as the woodpecker are particularly useful yet, it appears that the subjecting of animals to acceleration-deceleration injuries will ultimately be necessary. Such experiments must

be undertaken only with the utmost of care and caution respecting the rights and ethics of the animals. Alternatively, artificial models can be used. However, these models have proven to present multiple challenges which have caused many to strongly object to generalizations from artificial models to the clinical scenario. Living tissues have special properties that can not be replicated in artificial constructs.

REFERENCES

Duhaime A, Gennarelli TA, Thibault LE et al: The shaken baby syndrome: a clinical, pathological, and biomechanical study, *J Neurosurg* 1987; 66: 409-415.

Levin AV: Retinal haemorrhage and child abuse. In: David TJ, ed. *Recent Advances in Paediatrics*, no. 18. London: Churchill Livingstone, 2000, pp. 151-219.

Ommaya AK, Faas F, Yarnell P: Whiplash injury and brain damage: an experimental study. *JAMA*. 1968 Apr 22;204:285-9.

Smith SL, Andrus PK, Gleason DD, Hall ED: Infant rat model of the Shaken Baby syndrome: preliminary characterization and evidence for the role of free radicals in cortical hemorrhaging and progressive neuronal degeneration. *J Neurotrauma* 1998; 15:693-705

Tomei G, Spagnoli D, Ducati A, Landi A, Villani R, Fumagalli G, Sala C, Gennarelli T: Morphology and neurophysiology of focal axonal injury experimentally induced in the guinea pig optic nerve. *Acta Neuropathol* 1990;80:506-513.

Following completion of a pediatric residency at Children's Hospital of Philadelphia, Dr. Levin continued on as a staff child abuse pediatrician at that institution. He subsequently completed an ophthalmology residency at Wills Eye Hospital in Philadelphia followed by a pediatric ophthalmology fellowship at The Hospital for Sick Children in Toronto where he is now a staff ophthalmologist and Associate Professor in the Departments of Pediatrics, Ophthalmology and Genetics at the University of Toronto. He maintains an active clinical and research interest in the ocular manifestations of child abuse.

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New York Passes New SBS Law

(Continued from Page 1)

Evaluation of the Dias program continues, but the interim results indicate that it has significantly reduced SBS injuries in western New York. In its initial year, the incidence of shaken baby syndrome presenting at Children's Hospital of Buffalo was reduced from an average of one every six weeks to one in a year.

The program was subsequently extended by Dr. Dias and Dr. Linda Barthauer, of Strong Children's Hospital, as the Upstate New York SBS Prevention Project, to seventeen counties in western New York with grant assistance from New York State's William B. Hoyt Memorial Children and Family Trust Fund.

The two year evaluation report on the Project reported a reduction of more than 60% in the area served by the

Project. The Project has received a great deal of press, including an article in the New York Times on May 29, 2001, reporting on the remarkable success of this prevention program.

Still Room To Improve

While the statute adopted by New York does require that hospitals provide information about SBS to new parents, it does not require the implementation of the Dias program. To satisfy the letter of the law, hospitals need merely provide a brochure to prospective parents who are making arrangements for delivering at the hospital.

In contrast, an essential element in the effectiveness of the Dias program seems to be that it actively engages the parents in the hospital with a powerful video presentation at a time when they are most receptive to information.

Additional New York Efforts

Earlier that year, responding to the shaking deaths of five young children in the Hudson Valley area over a nine-month period, a group of parents and friends formed the Skipper Initiative to increase awareness about shaken baby syndrome and to educate parents and caregivers about how it can be prevented. One of the first initiatives was a letter-writing campaign to state legislators, urging adoption of the SBS bill as a first step for New York state.

Some hospitals in the Hudson Valley are doing more than the law requires. For instance, Vassar Hospital has been working with the Skipper Initiative and the Child Abuse Prevention Center of Poughkeepsie, to implement the Dias program in Dutchess County. In 2000, three counties in the Albany region formed a collaboration to implement the

Make A Difference

The National Center on Shaken Baby Syndrome is strongly dedicated to preventing shaken baby syndrome. Through years of research and hours of hard work, the National Center provides educational and prevention materials worldwide.

On a daily basis, staff members of the National Center speak with care givers about the dangers of shaking a child, as well as speak to parents of SBS victims or those who are trying to deal with a crying infant. Legal experts on staff give legal assistance and advice to numerous callers, parents and prosecutors.

Prevention curriculums are designed for numerous audiences, including dads and expectant fathers, junior high and high school students, hospital personnel and law enforcement and prosecution agencies.

All of these efforts are designed with one thought in mind -- to forever end shaken baby syndrome. As a non-profit agency, the National Center depends upon donations to make this possible.

To make a tax-deductible donation to the National Center on Shaken Baby Syndrome, call (801) 627-3399 or toll free (888) 273-0071, or go online at www.dontshake.com.

program at seven maternity hospitals, and Westchester County is planning to initiate the program county-wide in January.

There are significant challenges that remain. While Dr. Dias estimated that the cost of extending the program statewide would only be \$1.2 million, the prospects of funding is uncertain at a time when New York state faces serious budget shortfalls as a result of the World Trade Center tragedy.

Hospitals also have limited resources to implement new programs. However, the Skipper Initiative is working with Dr. Dias to demonstrate to the state legislature that full funding for prevention will still cost less than the medical and consequent costs of shaking injuries.

Dr. David Corwin, a Utah researcher replicating the Dias program in cooperation with the National Center on Shaken Baby Syndrome, helped that project receive funding from insurance companies and the State Medicaid program by analogizing the prevention program to a “vaccination” against shaking injuries.

Although the hospital-based program developed by Dr. Dias appears to be a very effective intervention, it is prospective in nature. Seven hundred babies are born on an average day in New York state, and they remain at risk for three to four years. Parents of children who were born before these prevention efforts started also need to be educated. Instead of waiting for parents of those children born before the hos-

pital programs are established to seek out prevention information, methods must be found to “push” that information.

By working with the state, local departments of health and professional groups, the Skipper Initiative will work to educate day care providers, pediatricians, parenting educators and similar groups, not only about the dangers of shaking infants, but ways that they can become “partners” with parents by educating them about how to prevent injuries to their children.

For instance, when Governor Pataki announced in June that the state would mail all day care providers information about the “Back to Sleep” campaign to reduce SIDS deaths in day care settings, the Skipper Initiative requested that the mailing also include information on preventing SBS injuries and increasing awareness, similar to the mailing the state of Michigan sent to 22,000 licensed day care providers following a number of SBS deaths involving day care providers.

The Skipper Initiative is encouraging New York state to incorporate information about shaking injuries and prevention into the initial training required to become a licensed day care provider in New York. We are also urging parents to bring up the topic with pediatricians during their regular pediatric checkups if the pediatrician doesn’t bring it up first.

Experience shows that SBS is a very difficult topic to broach with parents in most settings. A positive, proactive

approach that gives parents information they need so that they may best protect their child by educating others about shaking injuries seems to result in greater receptivity than messages directed simply at preventing parents from shaking.

For more information regarding the New York law, visit the New York Legislation web site at <http://leginfo.state.ny.us:82/> and reference bill number A2208-A. The full text, sponsor information, voting breakdown and summary are available at this site.

George Lithco and his wife, Peggy Whalen, are the parents of "Skipper" Lithco, an eleven-month-old boy who was shaken by his home day care provider.

The Skipper Initiative was formed by family and friends to promote awareness and education about SBS prevention efforts, and includes the family of Dale Anderson, Jr., a seventeen-month-old boy who was also shaken by his home day care provider a few months later. More information is available at www.SkipperVigil.com.

For more information about Dr. Dias’ hospital program, you may email: mdias@psu.edu.

For more information about Utah’s hospital program, you may email: dwilliams@dontshake.com.

Upcoming Conferences 2002

January 9, 2002, Training Institute: The Medical Assessment, Investigation and Prosecution of Shaken Baby Syndrome, Tucson, AZ, (928) 445-5038 or email: mail@pcaaz.org

January 10-11, 2002, 13th Arizona Statwide Child Abuse Prevention Conference, Tucson, AZ, (928) 445-5038 or email: mail@pcaaz.org

March 2-5, 2002, Prevent Child Abuse America National Conference, Dallas, TX, (312) 663-3520 ext. 221, or visit www.preventchildabuse.org

April 25th-26, 2002, The 9th Annual Governor's Conference on Child Abuse and Neglect Designing the Future: Promising Strategies for Strengthening Families and Keeping Children Safe, Baltimore, MD, (410)767-1841, or alisa@mail.ocyf.state.md.us

May 29-June 1, 2002, American Professional Society on the Abuse of Children Tenth Annual National Colloquium (APSAC), New Orleans, LA, (405) 271-8202, email: heather-newton@ouhsc.edu or visit <http://www.apsac.org>

July 7-10, 2002, 14th International Congress on Child Abuse and Neglect, ISPCAN, Denver, CO, email: pat.knox@uchsc.edu or visit <http://www.kempecenter.org>

August 5-6, 2002, 15th Annual Mountain West Conference on Child Abuse and Domestic Violence - Preserving the Innocence of Children, Ogden, UT, (801) 393-3366 or visit www.capcenter.org

August 5-8, 2002, Crimes Against Children Conference, Dallas, TX (214) 818-4070 or email: cynthia@dcac.org

September 15-18, 2002, The Fourth National Conference on Shaken Baby Syndrome, Salt Lake City, UT (801) 627-3399, www.dontshake.com

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