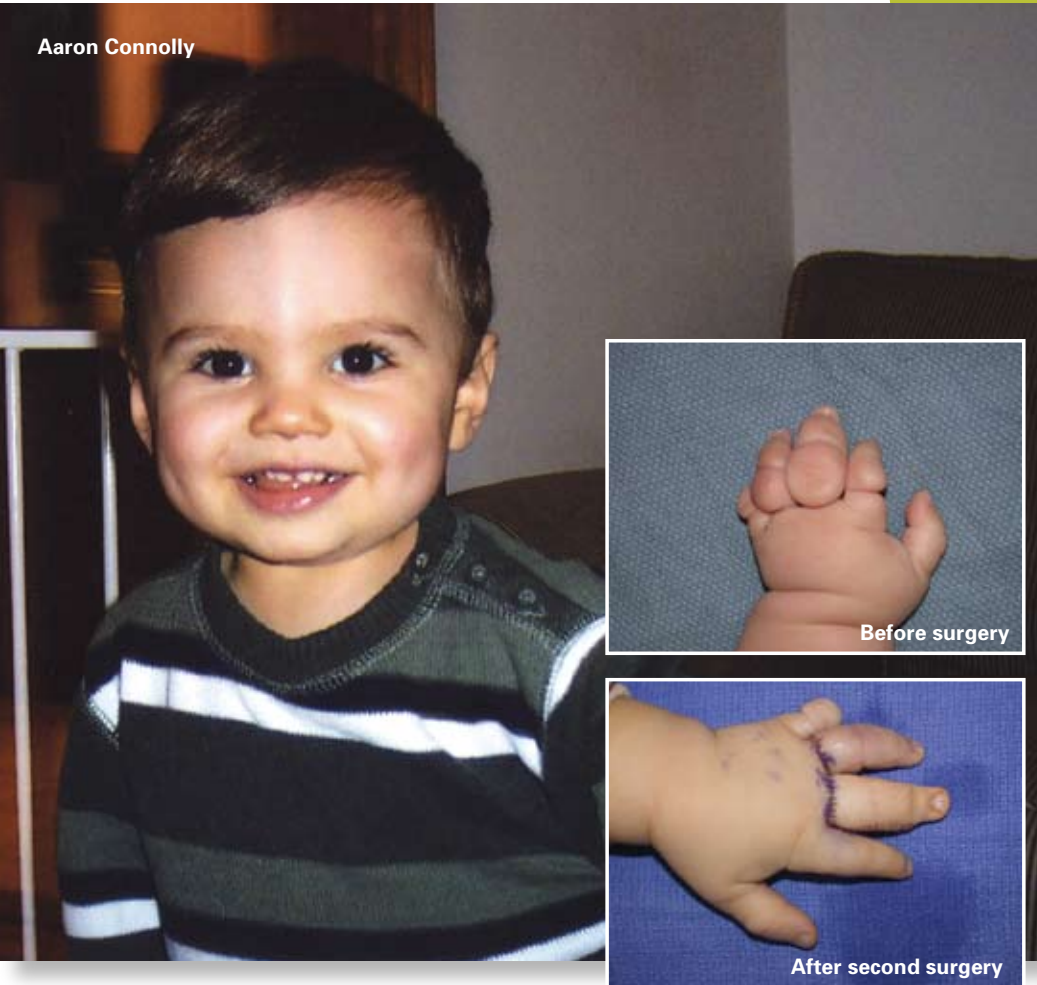




Pediatric Views

December 2006

Aaron Connolly



Helping hands

When your hands are deformed or disabled, even the simplest tasks are incredibly difficult. So when Aaron Connolly was born with a deformed hand due to Amniotic Band Syndrome (ABS) nearly two years ago, his parents, Ed and Mary, were understandably concerned. "When we saw Aaron's hand, we didn't know what to think," says Mary. "His fingers were so swollen—we didn't know if he'd be able to keep them."

ABS, also known as Constriction Band Syndrome, is a congenital disorder that occurs in about one in every 10,000 to 15,000 babies when fibrous bands of the amniotic sac become entangled around a developing fetus. In some cases, the bands wrap around the fetus' head or umbilical cord, causing a miscarriage. More commonly though, the bands wrap around a limb, fingers or toes, creating severe constrictions.

Depending on its intensity, a constriction may result in nothing more than an unsightly cleft extending around a digit or limb. However, deeper bands can cause severe swelling, cut off of lymphatic or venous flow and interfere with development of the appendage. If a band is tight enough, the constriction may even cause an *in utero* amputation of the appendage.

»» continued on page 6

Improving patient care through technology

The Institute of Medicine's groundbreaking 2000 report *To Err is Human: Building a Safer Health System* revealed an astounding number of medical errors in the United States that resulted in tens of thousands of patient deaths per year. Unsurprisingly, the report spurred a nationwide movement to improve patient safety, and Children's Hospital Boston, like hospitals across the nation, has undertaken a host of initiatives to make its patient care even safer.

Children's Hospital Applications Maximizing Patient Safety (CHAMPS) is the hospital's most significant initiative in the effort, and is about to roll out the next phase of its multi-year program. CHAMPS is an integrated clinical information system that lets clinicians share patient information electronically, view test results, access patient information, order and administer medications and document nursing notes.

It is expected to have a significant impact on patient safety: Important data will be less prone to errors of handwriting interpretation. Also, it will allow more than one clinician at a time to review patient data (including lab results and medical histories) and to access it remotely.

The first phases of the CHAMPS project have replaced the hospital's Results Reporting system and moved many facets of clinical documentation from paper to electronic format.

The next phase, slated to go live in early 2007, involves a host of new technologies. Prescribers will place rules-supported orders electronically, while nurses will use point of care handheld devices to scan barcoded patient wristbands and medications prior to administering medication. Additional clinical documentation and the Medication Administration Record will move to PowerChart and bedside medical device interfaces will download patient data from bedside monitors directly to PowerChart.

Read about future CHAMPS advances, including physician documentation, in future issues of Pediatric Views.

“Kids with Asthma Can...”



Children’s has teamed up with a number of local institutions to launch a multi-media asthma management campaign, “Kids with Asthma Can...” The six-month campaign uses characters from WGBH’s TV series *Arthur*, which features the popular character Arthur the Aardvark and his asthmatic friend, Buster.

For more information, go to www.childrenshospital.org/newsroom/arthur.

Developmental screening site

Developmentalscreening.org is a free Web site for pediatricians planning to incorporate standardized developmental screening in the office setting. Children’s Hospital Boston pediatrician Alison Schonwald MD, FAAP, created this tool kit for pediatricians who want to implement the new American Academy of Pediatrics policy guidelines. The site aims to provide everything you need to know about developmental screening, including how to pick a screening tool, how much it costs, billing and time requirements.

A squirt of prevention

In this cold and flu season, it’s important to advise your patients on how to stop the spread of germs.

For a helpful tip sheet, go to www.childrenshospital.org/sanitizer.



MARK YOUR CALENDAR

January is Cervical Cancer Screening Month. For more on how the Human Papillomavirus Virus (HPV) relates to cervical cancer and the new HPV vaccine, see the Q&A on the next page.



Continuing Medical Education

Pediatric Healthcare Summits

Children’s Hospital Boston, in conjunction with the community hospitals listed below, presents the following Pediatric Health Care summits. The summits are free, community-based continuing medical education seminars designed to inform primary pediatric providers about trends in the management of common pediatric health concerns. All of the courses run from 7:30 a.m. to 12:30 p.m. and are 4 CME credits (CEU credits also available).

Wednesday, April 11 **Beverly Hospital, Beverly, Mass.**

- The Pediatric Hip: Exam Basics and Common Problems
- Asthma: Current Therapies and Treatments
- Psychopharmacology for the Primary Care Provider
- Headaches in Children: When to Worry?

Thursday, May 17 **South Shore Hospital, Weymouth, Mass.**

- Healthy Bones in Children and Adolescents
- Diabetes: Treatment Updates for the Primary Care Provider
- Common Problems in Pediatric Ophthalmology
- ADHD: How to Manage in the Office and When to Refer

Wednesday, June 13 **MetroWest Medical Center, Framingham, Mass.**

- Children in Crisis: A Challenging Issue Facing our Children
- International Adoption
- Pediatric Hand Injuries: How to Assess and Treat in the Office
- Tips for Caring for the Acutely Depressed Child

Brochures for the individual conferences will be mailed. To register in advance, visit www.childrenshospital.org/cme or call Physician Relations at (617) 355-2454.

Frontiers in Pediatric Surgery

Wednesday, March 7, 7:30 a.m. to 3:45 p.m.

The Conference Center at Waltham Woods
860 Winter Street, Waltham, Mass.

A continuing education series of Children’s Hospital Boston and Harvard Medical School Department of Continuing Education. Brochures for the conference will be mailed. For more information, contact Anne Vaccaro at (617) 355-5186.



Doctors Stephen Shusterman, Bonnie Padwa and Richard Bruun of the Department of Dentistry at Children’s Hospital Boston, were invited speakers at the National Child Cleft Lip & Palate Therapy Seminar in the People’s Republic of China.



Lydia Shrier, MD, MPH

Lydia Shrier is the director of Clinic-Based Research in the Division of Adolescent/Young Adult Medicine at Children’s Hospital Boston. One of her specialties is gynecology.



Breakthrough HPV vaccine approved to fight cervical cancer

The U.S. Food and Drug Administration recently approved Gardasil, the first vaccine to help prevent cervical cancer and other conditions caused by particular types of genital human papillomavirus (HPV). HPV is the most common cause of new sexually transmitted diseases and more than 20 million Americans currently have the virus. Gardasil protects against four types of HPV. Here, Dr. Lydia Shrier talks about the new vaccine and its impact on young women’s health.

What is HPV?

It is a group of more than 100 different types of viruses, more than 30 of which are sexually transmitted. Low-risk types of HPV can lead to benign, but bothersome, genital warts or abnormal changes in the cervix, but generally don’t progress to serious disease. However, high-risk types can lead to cervical cancer and, rarely, cancers of the vulva, vagina, anus or penis. There is no cure for HPV and a person can have more than one type.

What is Gardasil?

It’s a vaccine recommended for females 9 to 26 years old to prevent them from getting four particular types of HPV: types 6 and 11, which cause 90 percent of genital warts, and types 16 and 18, which are responsible for 70 percent of cervical cancers. It’s given as an intramuscular injection in a three-shot series over a six-month period. It doesn’t treat existing HPV infections, genital warts, precancers or cancers.

How long has Children’s offered the vaccine?

Gardasil has been available at Children’s since mid-October of 2006.

How effective is it?

In females who had not been exposed to HPV types 6, 11, 16 or 18, studies have shown 100 percent efficacy in preventing cervical precancers and almost 100 percent efficacy in preventing vulvar and vaginal precancers and genital warts. The vaccine was less effective in

young women who had already been exposed to one of the HPV types covered by the vaccine or those who missed a dose. We don’t know if a booster shot will be needed in the future, but studies show that women are protected for at least five years from getting HPV.

Who should receive the Gardasil vaccine?

The Advisory Committee on Immunization Practices recommends it for 11 and 12 year old girls since it’s critical that young women are vaccinated before they come in contact with HPV through sexual contact. But the vaccine can also be given to girls as young as 9 (at the medical provider’s discretion) and to 13- to 26-year-olds, if they haven’t already received the vaccine or completed the series.

Why hasn’t it been approved for use in men?

While the vaccine is safe and effective in producing antibodies against HPV in males, there’s just not enough research to support vaccinating them. Gardasil is expensive and the frequency of genital warts and certain cancers in males is relatively low, so officials haven’t seen enough compelling evidence to approve the vaccine for males yet. With more research and studies, however, males may someday be vaccinated.

What would be the benefits of vaccinating men?

The primary purpose of vaccinating them would be to prevent infection in females—if males don’t have HPV, they can’t spread it to their female partners. Also, the vaccine could help males protect themselves from genital warts, anal and penile cancers and other conditions that result from HPV.

How does the vaccine work?

It’s made of virus-like particles that look to the body like HPV, which encourages the body to make antibodies against it. So if and when you’re exposed to HPV, you’d have antibodies so your body can fight

and kill the virus. Gardasil isn’t a live vaccine, which means it doesn’t contain the actual virus. You can’t get HPV from the vaccine.

Are there side effects?

The most common side effects are pain, swelling and redness at the injection site, and, rarely, people have had fever, nausea, dizziness or vomiting.

Should females continue to get screened for cervical cancer after getting the vaccine?

Yes. Since the vaccine does not protect against all types of HPV responsible for cervical cancer, sexually-active women should continue to have an annual gynecological screening for cervical cancer and other conditions.

Can women over 26 get the vaccine?

To date, the studies on Gardasil don’t include women over 26, so the vaccine isn’t approved for them at this time.

How much is it and will it be covered by insurance plans?

The current price is about \$120 per dose, which comes to \$360 for the full series of injections. Insurance companies are negotiating coverage of the vaccine now.

Are there other HPV vaccines in development?

GlaxoSmithKline is developing Cervarix, a vaccine targeting HPV types 16 and 18.

How valuable is this for women’s health?

This vaccine is a big deal. We’re talking about preventing a major type of cancer, which is momentous.

For more information or to schedule an appointment with Children’s Division of Adolescent/Young Adult Medicine, visit www.childrenshospital.org/adol or call: (617) 355-7181 (Boston) (781) 672-2100 (Lexington) (978) 538-3600 (Peabody) (781) 216-2100 (Waltham) (781) 331-4715 (South Shore Hospital)

Sports Medicine goes on the offensive

It's been almost half a century since Sports Medicine's inception in this country. Initially, the field was simply about treating athletic injuries. The focus later extended to injury prevention, and today, Sports Medicine has grown to encompass even more wide-reaching topics: It's now at the forefront of a movement pushing children to be athletic despite their illnesses. Lyle Micheli, MD, director of Sports Medicine at Children's Hospital Boston says, "The evolving role for the field across the country is Sports Medicine as a health intervention. It's a very ennobling idea."



Recommending sports as a health intervention (promoting a behavioral change to create a more healthful lifestyle) can be complex when it comes to children who have certain diseases or conditions. The biggest challenge, according to Dr. Micheli, isn't figuring out which sport is best. Instead, it's changing the national mindset about what children who are ill can do. "There's still this tendency to not let children with illnesses play sports," he says. "Parents think it's risky because their child's asthma might flare up or think they might get hurt."

Dr. Micheli and his Sports Medicine colleagues have become more and more aware of the overall benefits that sports can have on children with diseases. He says, "Generally, kids who are ill respond very well to sports because it's a way for them to make personal gains." He's also honed in on which particular sports suit which patients. When it comes to obesity, for example, he's found that a non-aerobic activity can actually work best. "Obese kids sometimes aren't very agile, but they make tremendous gains in strength training programs," Micheli explains. "They start out being able to bench-press 10 pounds, and soon they can do 15. They've achieved something." Dr. Micheli sees many patients who have diabetes; for them, he recommends endurance sports, in particular running or swimming, as they stabilize insulin uptake by the body. He's also seen impressive results in kids with Muscular Dystrophy who play sports—strength training, in particular, to help the muscles directly.

Dr. Micheli's colleague, Jonathan Rhodes, MD, senior associate in Cardiology, specializes in Exercise Physiology. He's found that the nationwide tendency to limit the activities of children with illnesses can be counterproductive—even harmful. He estimates that the vast majority of kids recovering from congenital heart disease—he puts the number at about 90 percent—can and should exercise and play sports. But they don't. "Some of that is because of

residual health problems," says Dr. Rhodes, "but another reason is that they're couch potatoes. They're completely out of shape because their parents or coaches or doctors tell them not to exercise. And that only exacerbates the problem. Should these kids play on varsity? No. Can they do aerobic exercise in a not-highly-competitive setting? Absolutely."

Of all the physical activities Dr. Micheli has recommended to children with or recovering from diseases, he's had tremendous success with one in particular: "I love for kids to try martial arts," he says. "They can learn balance, flexibility, endurance and strength, and there's a strong psychological component that teaches them self-worth and responsibility."

These psychological components are of particular interest to Ariel Botta, LICSW, clinical social worker and coordinator of the Group Therapy Team in Children's Department of Psychiatry. She agrees that team sports can be beneficial in fostering physical, social and emotional growth in all children. However, she says, the consultation with the patient and the family is crucial in determining which sport is appropriate, especially if a child has low self-esteem related to his or her disease.

Of course, the added benefit that all children get from sports—whether they're healthy or recovering from an illness—is that it's play. "Sports can be very central to a kid's life," says Dr. Micheli. "These kids can get all the enjoyment that comes from having that kind of camaraderie, and they'll make some of the best friends in their lives through their sports teams."

For more information on Children's Division of Sports Medicine, visit www.childrenshospital.org/sportsmed.

General guidelines for recommending sports to children who are recovering from an illness or living with a chronic disease

Diabetes	Endurance sports like running, swimming or lacrosse to stabilize insulin uptake
Muscular Dystrophy and Multiple Sclerosis	Strength training like weightlifting to help muscles develop
Attention Deficit Disorder	Dance to teach moving and discipline or martial arts to help with the psychological component
Asthma	Aquatic sports because of the warm, moist air; cold, dry air can cause asthma symptoms
Cardiac disease	Aerobic activity is often recommended to stimulate the heart muscle
Epilepsy	Regular exercise can decrease the symptoms of this condition. No contact sports, but others with sustained exercise, like basketball and baseball.
Obesity	Any sport is beneficial, but strength training and martial arts are particularly good
Autism	Any team sport, depending on how mainstreamed the child is at that stage
Mental retardation	Dance helps teach how to discipline their movements

A biological cause for SIDS

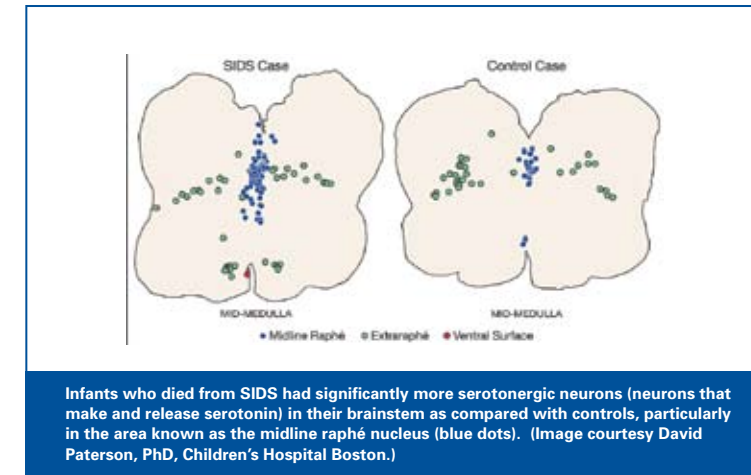
New autopsy data provide the strongest evidence yet that sudden infant death syndrome (SIDS) has a concrete biological basis. In the November 1 issue of the *Journal of the American Medical Association*, Children's Hospital Boston researchers show that babies who die from SIDS have significant abnormalities in the brainstem's serotonin system, which is thought to help coordinate breathing, blood pressure, sensitivity to carbon dioxide and temperature.

Neuropathologist Hannah Kinney, MD, neuroscientist David Paterson, PhD, and colleagues examined brainstem tissue from 31 infants who died from SIDS and 10 who had died from other causes. They documented the most comprehensive set of defects known to date: deficiencies in the serotonin receptor 5HT1A, an abnormally high number of neurons that make and release serotonin; a preponderance of immature serotonergic neurons; and insufficient amounts of the serotonin transporter protein, which "recycles" serotonin so neurons

can reuse it. Male SIDS infants had significantly fewer 5-HT1A receptors than females, offering a possible explanation why boys succumb to SIDS twice as often as girls.

A current theory on the cause of SIDS is that when babies sleep face-down or when their faces are covered by bedding, they re-breathe exhaled carbon dioxide. Normally, the rise in CO₂ activates neurons in the brainstem that stimulate respiratory and arousal centers in the brain, causing the baby to wake up, turn his head and breathe faster. Kinney believes that defects in the serotonin system can cause SIDS by impairing these protective reflexes.

Although more research is needed, Kinney, Paterson and colleagues believe that insults like maternal smoking and alcohol use during early fetal development may derail development of the brainstem serotonin system. Based on their findings, they hope to develop a diagnostic test to identify infants at risk for SIDS. They also envision a drug to protect infants.



Small-jawed babies at higher risk for life-threatening choking and gagging

About 6 percent of full-term newborns experience an apparently life-threatening event (ALTE)—a choking or gagging episode marked by apnea, color change or loss of muscle tone. In teaching CPR to parents whose babies had been hospitalized after such an episode, Mary Horn, RN, MS, RRT, began to notice a pattern: The babies almost always had smaller jaws.

Horn, a clinical nurse specialist in Surgical Programs at Children's Hospital Boston, noticed that the babies often put their hands to their chin, as if to thrust the jaw forward. She also noticed that ALTEs tended to happen when the jaw was pushed back, such as during feeding or when the baby was in a swing or car seat with the head tilted back. So she decided to conduct a case-control study using four different measurements of the mandibles of 25 infants with a history of ALTE and 47 healthy infants. Confirming her suspicion, the ALTE group had a significantly smaller mandibular size.

Horn believes that a smaller jaw makes it more likely that the tongue will fall back and obstruct the airway, and that the hand-to-chin posture is the baby's way of compensating. Based on her observations, reported in the October *Journal of Pediatrics*, Horn suggests that pediatricians note jaw size during routine exams to identify infants at risk for ALTEs. Parents can adopt techniques to prevent these frightening events, such as putting a thumb under the baby's chin while feeding in order to bring the tongue forward.



Brenna Carrier getting her mandible measured

Names and faces

Children's pediatrician **Celeste Wilson, MD**, received the New Investigator/Educator award at the 2006 national meeting of the Association for Medical Education and Research in Substance Abuse. The award recognizes new researchers and educators in the field of substance abuse.



Nancy Andrews, MD



Gary Fleisher, MD

On October 9, the national Institute of Medicine (IOM) announced the election of 65 new members, among them two Children's physicians: worldwide expert on iron deficiency and iron overload disorders **Nancy Andrews, MD, PhD**, in the Division of Hematology/Oncology, and **Gary Fleisher, MD**, pediatrician-in-chief, chair of the Department of Medicine and former chief of Emergency Medicine.

T. Berry Brazelton, MD, founder of the Brazelton Touchpoints Center at Children's Hospital Boston, has recently garnered several awards, including the Great Friends to Kids Award from the Association of Children's Museums; the 2006 Lifetime Achievement Award from the American Academy for Cerebral Palsy and Developmental Medicine; the 2006 Marjorie Karmel Award from Lamaze International; and the 2006 Arnold Lucius Gesell Prize.

Call for questions

Have a clinical question you'd like answered by a Children's Hospital Boston expert? Simply send an e-mail (50 words or fewer) to Pediatric.Views@childrens.harvard.edu. We'll find the appropriate clinician to comment on your question and print the answer in a future issue of *Pediatric Views*. Through this forum, we hope to open a new channel of communication among pediatricians throughout New England, through which you and your peers can create exciting and informative dialogues.

Helping hands » continued from page 1

Aaron's condition was a moderate case of ABS that affected the fingers on his left hand. Constriction rings caused his index, middle and ring fingers to become misshapen and swollen. The rings also caused his pinky finger to be partially amputated *in utero*. Fortunately, the underlying bones in his other fingers were unaffected.

Shortly after Aaron was born, the Connollys met with Children's Hospital Boston reconstructive plastic surgeon **Brian Labow, MD**, who specializes in treating congenital hand anomalies. "We perform surgery immediately if the constriction bands cause severe swelling and diminished circulation," says Dr. Labow. "In Aaron's case, his fingers were not threatened, and we were able to defer surgery until he was 6 months old."

Because so many of Aaron's fingers were affected, some having more than one ring, Dr. Labow staged his treatment over three separate operations. During the first surgery, Dr. Labow excised the single constriction band on Aaron's index finger and removed the bands near the ends of Aaron's middle and ring fingers. A few months later, Dr. Labow removed the remaining constriction bands on Aaron's middle and ring fingers. He also debulked and contoured the subcutaneous tissue in an effort to make the hand appear more normal.

This type of surgery is designed to improve both the appearance and function of the hand. "We recognize the social elements involved in pediatric hand surgery," says Dr. Labow. "Our hands are an important part of our daily social interactions. They're out in the open for everyone to see, so an essential part of these operations has been making Aaron's hand as symmetrical as possible with his unaffected hand."

Because Children's Department of Plastic Surgery sees so many children with congenital hand defects each year, techniques to achieve the same functional results while minimizing scarring and maximizing aesthetics are constantly being refined.

The department treats a wide array of congenital hand anomalies, including common conditions such as syndactyly, a condition in which two or more fingers are fused together; and polydactyly, a condition in which one or more extra digits may be present. Rare disorders of malformation of the arm and hand, vascular anomalies and over- and undergrowth deformities are also treated.

Dr. Labow says that Aaron will likely have excellent long-term function of his hand, although annual check-ups will be necessary. "Follow-up is an essential part of the process," he says. "You have to evaluate the effect that the disease and surgery have had on the growth and development of the child's hand, and conversely, the effect that growth has on the function and appearance of the hand. These are not operations you perform and feel that you're done. The hand grows throughout childhood and is called upon to perform progressively intricate tasks. You have to constantly evaluate whether additional surgery is required."

In Aaron's case, the operations have gone well and his hand is improving. This past September, he had his third operation, this time to repair his pinky. Additional operations may be required in the future. In the meantime, Aaron will undergo occupational therapy to help him use his hand, to soften scars and to decrease any remaining swelling.

"I'm pleased with Aaron's progress," says Dr. Labow. "I've known him from the first hour of his life. One of the best parts of my practice is the satisfaction of watching kids like Aaron grow and develop and recognizing the impact that surgery has had in their lives."

For more information or to schedule an appointment, visit www.childrenshospital.org/plastics or call (617) 355-7252 (Boston), (781) 672-2100 (Lexington) or (781) 216-2100 (Waltham).

Tips for tots

Information for clinicians to share with patients and their families

Source: the Regional Center for Poison Control and Prevention

Poison prevention tips

Cozy fires, family gatherings, decorations and gifts are all part of what makes the holiday season so special. But these traditions introduce new objects to the home that can be hazardous to small children. As the holiday season approaches, the Regional Center for Poison Control and Prevention, based at Children's Hospital Boston, reminds caregivers to update patient families about poison prevention, ensuring that every family has a happy, safe holiday season.

Carbon Monoxide (CO)

CO is an odorless, colorless, poisonous gas that's created from burning fuel. To prevent carbon monoxide poisoning:

- Install a carbon monoxide detector in your home.
- Have a professional technician inspect the gas-burning appliances and venting and chimney systems in your home at the beginning of each winter.
- Make sure appliances and chimneys have proper airflow.
- Don't use the oven or gas range for heating your home, and never let the fireplace or space heater run while you sleep.
- After a snowfall, be sure to shovel around the home heater's exterior ventilation areas.
- Check vehicle exhaust pipes and don't leave children in the car while it's running.
- Store kerosene and gasoline out of the reach (and sight) of children.

Antifreeze

Antifreeze is a common automotive product that can cause severe poisoning or even death if swallowed.

- Always store antifreeze in its original container. Because antifreeze is sweet, children may drink it.
- Keep antifreeze and windshield washer fluid in a locked cabinet.

Decorations and Gifts

- Avoid using holly berries and mistletoe if you have young children in the home. These plants can be poisonous if swallowed. Christmas cacti and poinsettias aren't poisonous if eaten, but they may cause mild stomach upset. Also, the sap of the poinsettia plant can cause a skin rash.
- Be sure Christmas trees are secure in their stands. Hang breakable ornaments high on tree branches.
- Keep ornaments out of children's reach. Heirloom and/or older ornaments may contain lead; angel hair and glitter can irritate the eyes and skin; and aerosol products, such as artificial snow, should not be used without proper ventilation.
- Keep snow globes out of reach, since they're made of plastic and calcium carbonate.
- Be sure candles are out of children's reach. Keep an eye on lit candles and put them out as soon as they get low. Most importantly, be sure to blow them out before going to bed.



Children's Hospital Boston

- Keep all oil lamps out of children's reach since oils come in a variety of soft-drink colors. If swallowed, lamp oil is drawn into the lungs from coughing, which can lead to pneumonia. Even lamp oil that is spilled can be aspirated.
- Other common holiday items to keep away from children include bubble lights, batteries and air freshener sprays.

Entertainment

- Keep all tobacco out of reach of children and empty ashtrays promptly. Consuming tobacco products in small amounts can cause nausea and vomiting—even convulsions.
- Remember that ethanol is the main ingredient (often 50 percent or more) in cologne, perfume, aftershave and mouth wash. These items, packaged in colorful bottles, can be appealing to children. Just two ounces of perfume can cause severe poisoning in a young child.
- Offer guests a locked cabinet in which to store their medicine, so children can't access it.
- When traveling with children, check your new surroundings carefully and move pills, vitamins, medicines, cosmetics and cleaning products out of their reach.
- When attending holiday gatherings, be sure to inform your hosts about your children's food allergies.

If you suspect a poisoning, it's important to act fast and act smart! First, call the Regional Center for Poison Control and Prevention's emergency hot line at (800)-222-1222.

- Chemical poisons like cleaners should be rinsed or washed off the skin with tap water immediately.
- For inhalation of poisonous fumes, get the child outside into fresh air as quickly as possible. If there is any question about her ability to breathe, call 911 first and then the poison center.
- When eye exposures occur, rinse with lukewarm water for 15 minutes. There is no need to force the eye open.
- Finally, if poison is ingested, don't administer syrup of ipecac or home-activated charcoal. These can cause injury if administered improperly.

For further information, call the Regional Center for Poison Control and Prevention at (800)-222-1222 or visit www.MARIPoisoncenter.org.



This article was adapted from content provided by Children's Hospital Boston to Yahoo! Health. For more pediatric health information from Children's, visit <http://health.yahoo.com>.



Photo: IMRIS

Introducing the latest one-hour medical drama. **Watch archived Webcasts of live surgeries.**

On October 25, Children's neurosurgical team, with the help of functional mapping and an intra-operative MRI, removed a brain tumor from the cortex of a 13-year-old patient. And they invited the world to watch live...

Missed it? Now you can view an archived video of this and other pioneering procedures right from your own PC. Visit www.childrenshospital.org/webcasts to view any or all of these Webcasts:

- **MRI & Neurophysiologically Guided Brain Tumor Resection**
- **Serial Transverse Enteroplasty Procedure, or STEP (Bowel Lengthening)**
- **Vertical Expandable Prosthetic Titanium Rib (VEPTR™) Implantation**
- **Robotic-Assisted Laparoscopic Pyeloplasty**
- **Panel Discussion: Fetal Cardiac Interventions**

Pediatric Views

Published by Children's Hospital Boston Department of Public Affairs and Marketing.
© Children's Hospital Boston, 2006. All rights reserved.

The information in this newsletter should not be taken as medical advice, which can only be given to you by your personal health care professional.

Editors: Alison Dargie, Erin Graham
Contributors: Michael Coyne, Matt Cyr, Beth DiPietro, Bryan Farrow, Nancy Fliesler, Meghan Perry
Designers: Javier Amador-Peña, Patrick Bibbins, Jeffrey Jalovec
300 Longwood Avenue, AT 600
Boston, MA 02115
(617) 355-6000

www.childrenshospital.org/views
Pediatric.Views@childrens.harvard.edu

NONPROFIT ORG.
U.S. Postage
PAID
Boston, Mass.
Permit No. 59240