

SEEDLINGS

News from the UNIVERSITY OF CHICAGO DEPARTMENT OF PEDIATRICS
the UNIVERSITY OF CHICAGO COMER CHILDREN'S HOSPITAL

Winter 2008

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COMER
CHILDREN'S
HOSPITAL



THE UNIVERSITY OF
CHICAGO

Innovative Approach Yields Best Outcome for Premie with Tumor

An innovative surgical technique, followed by carefully dosed chemotherapy, likely saved the life of a newborn with a fast-growing hepatoblastoma.

Chloe Lobins and her twin brother Brodie were born at 29 weeks at Methodist Hospitals in Gary, Indiana. Chloe weighed 2 lb. 7 oz. at birth. By six weeks, doctors at Methodist became concerned about Chloe's inadequate eating; a CAT scan revealed she had a fast-growing hepatoblastoma. Chloe was transferred to the University of Chicago Comer Children's Hospital for tertiary-level care.

At this point, Chloe was 63 days – still younger than a full-term baby. She weighed about 4 lbs. 6 oz. and her total blood volume was estimated at 200 cc, only enough blood to fill a teacup. "Her small blood volume intensified the risk of surgery," said Mindy Statter, MD, director of pediatric trauma and the first physician to examine Chloe at Comer Children's Hospital.

Surgeons here had no question that immediate surgery to remove the aggressive liver tumor was Chloe's only chance for survival. Yet Chloe's small size, coupled with the liver's vascularity, made conventional surgery highly risky.

Pediatric surgeon-in-chief Donald Liu, MD, PhD, noted, "Surgery in any premature infant carries with it a high morbidity and mortality risk, and surgery of the liver can be especially grave because the liver is such a vascular organ. There is a very real possibility that the infant will bleed to death during liver surgery."

Avoiding blood loss was crucial to the surgery's success. Dr. Liu, assisted by Dr. Statter, applied an innovative approach to stop blood flow to the liver while removing the tumor. Dr. Liu used a linear stapler – a vice-like device that features a sharp blade between four rows of titanium staples. Designed for procedures such as bowel resection in adults, the linear stapler device enabled Dr. Liu to simultaneously isolate the healthy liver from the tumor, seal off blood flow, and remove the tumor – all in less than one minute. The device left clean margins

around the liver, which facilitate long-term monitoring for cancer recurrence. At under 5 lbs., Chloe is believed to be the smallest patient to undergo such a procedure.

Treating the Cancer

Biopsy of the mass by University of Chicago pathologists determined that the infant had embryonal hepatoblastoma, which is even more aggressive than fetal hepatoblastoma. Dr. Liu



Chloe, now 20 months old, is a lively toddler

comments, "Although premature birth raises a baby's health risk, it was lucky that Chloe was born early so the tumor had less time to grow and spread before it could be found and removed." When removed, the tumor already had reached about 1.5 lbs.– a huge growth for a baby smaller than 5 lbs. in body weight.

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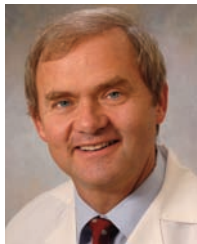


Letter from Michael Schreiber, MD
Professor of Pediatrics,
Interim Chair, Department of Pediatrics
Associate Fellowship Director, Neonatology

Dear Colleagues,

You will see in this issue the University of Chicago Comer's Children's Hospital helps its young patients address a variety of serious challenges.

Our cover story explains how an innovative surgical technique resulted in a successful outcome for a preemie diagnosed with an aggressive hepatoblastoma. In order to stop blood flow to the liver while removing the tumor, pediatric surgeon-in-chief, Donald Liu, MD, PhD, used a linear stapler. At under 5 lbs., the young patient is believed to be the smallest to undergo this procedure.



The University of Chicago Comer Children's Hospital cochlear implantation program opened in 2005. Headed by Dana Suskind, MD, associate professor of surgery and pediatrics, our cochlear implant team and approach has become a model for other children's hospitals. In this case you will meet a patient who, as a result of his implant, heard sound for the first time just after he celebrated his second birthday.

Since Comer Children's Hospital established its Pediatric Sedation Service unit in 2006, patients and physicians have offered very positive feedback. Heather Fagan, MD and Jamie Harrison, RN, explain that, whether families come for diagnostic tests or outpatient procedures, they appreciate the focused expertise and being able to return to normal activities in a few hours.

Determining whether a child is suffering from child abuse or child neglect requires professional knowledge and vigilance. In 1994 Comer Children's Hospital Child Protective Services developed a model that mandates expert medical review and assessment for children under three years of age. The program has since partnered with state and city professional agencies and other area hospitals. Jill Chapman Glick, MD, medical director of our children's hospital program, hopes all pediatricians will educate themselves because child abuse is the fourth leading cause of death in the U.S.

We welcome the opportunity to collaborate with you regarding your patients' medical challenges.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Schreiber".

Professor of Pediatrics
Interim Chair, Department of Pediatrics
Associate Fellowship Director, Neonatology

Letter from Donald Liu, MD, PhD
Mary Campau Ryerson Professor and Surgeon-in-Chief
University of Chicago Comer Children's Hospital
Vice-Chairman, Department of Surgery
University of Chicago Pritzker School of Medicine

Fellow Physicians:

As Surgeon-in-Chief at the University of Chicago Comer Children's Hospital, I am pleased to report some of the incredible advances made in surgery at our institution. We perform nearly 800 cases per year using minimally invasive techniques. It is important to emphasize that minimally invasive surgery is not restricted to merely using micro-instruments with tiny incisions; instead, a broader perspective includes reducing pain and suffering for pediatric patients.



In this issue of *Seedlings*, you will learn about Chloe Lobins, a premature infant born with a life-threatening liver cancer. When I examined Chloe, I knew that the operation would be dangerous but absolutely necessary for her to have any chance of survival. I suspected we could resect using a modification of a vascular stapling device. We could staple across and seal the liver as it transected the liver tissue to remove the tumor entirely, and at the same time leave us with a bloodless field. In one fell swoop – in less than 30 seconds – we resected the entire mass, greater than half the patient's liver, including the tumor, with completely clear margins. With great relief, we found no significant bleeding, and we were able to complete the operation in less than one hour. Importantly, Chloe recovered uneventfully and was soon discharged at home with a healthy life in front of her.

Chloe's case demonstrates how minimally invasive surgery transforms the approach to a child's care to provide the quickest pathway to recovery, less pain, and complete cure. At our institution, we have pioneered many minimally invasive surgical techniques using micro-instrumentation, high-definition camera technology, and robotic technology to perform standard operations normally performed through laparotomy, thoracotomy/large incisions such as fundoplication for gastro-esophageal reflux disease, bowel resection and reconstruction for inflammatory bowel disease (Crohn's Disease), ulcerative colitis, tumor biopsy and curative resection, and a variety of chest-wall reconstruction procedures such as pectus excavatum...the list goes on and on.

We are confident that most cases performed at the University of Chicago Comer Children's Hospital can benefit from minimally invasive surgery. I thank you again for this wonderful opportunity to share with you some of the recent advances at our institution and to invite you to contact us with any questions, suggestions, or encouragement as we strive to provide the absolute best of care for our kids.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Donald Liu".

Donald C. Liu, MD, PhD
Mary Campau Ryerson Professor and Surgeon-in-Chief
University of Chicago Comer Children's Hospital
Vice-Chairman, Department of Surgery
University of Chicago Pritzker School of Medicine

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Following surgery, Chloe began four monthly courses of chemotherapy as a precaution against tumor recurrence. Because of her young age and tiny size, Chloe was registered on a national study of pediatric hepatoblastoma that is assessing side effects and effectiveness of chemotherapy in young children.

Pediatric hematologist/oncologist Charles Rubin, MD, has followed Chloe's progress from post-surgery until the present. He continues to see Chloe monthly for comprehensive follow-up to detect the earliest sign of any recurrence. These monthly visits include chest X-ray and blood analysis for alpha fetoprotein, a key blood tumor marker.

Now 20 months old, Chloe is a lively toddler. Says Dr. Rubin: "Chloe is doing well. She is smaller than her twin brother, and has some motor and speech delay, for which she is getting therapy. These delays may be due to her prematurity rather than the chemotherapy. She also has some hearing loss, which is likely due to the chemotherapy." Dr. Rubin will continue to collaborate with Chloe's local pediatrician to monitor her growth and development through these critical years.

Doctors expect Chloe's liver to regenerate normally. The novel surgical technique, followed by chemotherapy finely tuned to this infant's tiny size, has yielded the best possible outcome for this young child.

Robotic Surgery Marks Chicago Breakthrough for Pediatric Patients

On January 7, 2008, ten-year-old Jaime Bazan returned to school and sports activities--a monumental feat considering that only 11 days earlier, he became the first Chicago pediatric patient to undergo robot-assisted urologic surgery.

On December 27, 2007, pediatric urologist Mohan S. Gundeti, MBBS, assistant professor of surgery at the University of Chicago Medical Center, performed a successful pyeloplasty to remove a blockage between Bazan's kidney and ureter. The boy returned home the day after surgery.

"He can jump, run, play football, and all the things he did before the surgery," said Gundeti, who joined the Comer Children's Hospital staff last November.

Doctors believe Bazan was born with a malformed ureter, which carries urine from the kidney to the bladder. Over the years, the boy occasionally complained of mild pain on his left side. In early November, the pain intensified. "He doubled over with pain," said his mother Denise Gonzales.

Following an initial exam at St. Francis Hospital, physicians sent Bazan to Comer Children's Hospital, where they performed diagnostic tests and determined that fluid was accumulating in his left kidney. If left untreated the fluid could lead to infection and eventual kidney damage.

Dr. Gundeti performed the surgery with the da Vinci robotic operating system, assisted by Greg Zagaja, associate professor of surgery. Through two half-inch and two one-third-inch-wide incisions, Gundeti used instruments with wrist-like articula-



Dr. Gundeti visits patient Jaime Bazan a day after performing the first robot-assisted urologic surgery on a pediatric patient.

tion and a tiny camera that transmits a three-dimensional image.

"With minimally invasive surgery, patients experience less blood loss, fewer complications, less pain and less scarring," Gundeti said. "In a traditional pyeloplasty, the abdominal muscle is cut. In minimally invasive pyeloplasty, recuperation time is reduced because there is no muscle cutting. In addition, outcomes are as good as or better than those with traditional surgery."

Mohan S. Gundeti, MD is named Director, Pediatric Urology



Mohan S. Gundeti, MD has clinical and surgical expertise in all aspects of pediatric urology, including perinatal urology, congenital malformations, bladder and voiding dysfunction and oncology. He specializes in the use of robotics and minimally invasive surgical techniques for complex urinary reconstructions and renal procedures.

Dr. Gundeti completed advanced training in pediatric urology at several internationally recognized teaching hospitals in the United Kingdom, including Great Ormond Street Hospital for Children and the Evelina Children's Hospital at Guy's & St. Thomas' Hospital in London. He is board certified in Pediatric Urology by the European Academy of Pediatric Urology and board certified in Urology by the Royal College of Surgeons, England (UK) and India. He is member of the British, European and American academy of Pediatric Urology.

Working with a team of experts, he focuses his clinical research on long-term outcomes in urologic patients and his laboratory research on minimal invasive surgery. Also a dedicated educator, Dr. Gundeti teaches clinical and technological skills to medical students, residents and fellows at the University of Chicago.

Cochlear Implant Brings Gift of Sound to Young Patient



Ian celebrates his "Hearing Birthday" with his grandmother, mother and a cochlear implant team member

Ian King celebrated two birthdays last year. In May he had his second birthday. In August he had his first "hearing birthday." That was the day his cochlear implant was activated and he heard sound for the first time.

Ian was born with profound sensorineural hearing loss. The delicate hair cells in his cochlea, which enable most people to hear the different pitches and rhythms of sound, were non-functioning. Not even the most advanced hearing aids can enable children like Ian to interpret sounds or understand words well enough to develop speech.

In the last decade, the cochlear implant device has allowed many children with severe or profound hearing loss to hear and learn to speak. An external portion of the device -- called the processor -- is positioned close to the child's ear. The internal portion -- the implant -- is placed in the cochlea. Microphones in the processor send sounds to the implant, which bypasses the hair cells and stimulates the hearing nerve.

The University of Chicago Comer Children's Hospital cochlear

implantation program opened in 2005 and is already considered a model for other children's hospitals. Dana Suskind, MD, associate professor of surgery and pediatrics, directs the cochlear implant team, which includes surgeons, audiologists, speech pathologists, a social worker, an educational liaison, a geneticist, a developmental pediatrician and a psychologist.

"Each member of the team plays a crucial role in the patient's care from diagnosis, to decision for surgery and throughout follow-up," says Dr. Suskind. "After surgery we tailor each child's program to match his or her unique educational needs."

In the months since Ian's implant was activated, he has become more curious and independent. He understands many words and recently began producing his first words.

"It's like he has had two lives -- non-hearing and hearing," says Ian's mother, Heather King. "It was such a special time when I first realized that Ian heard and understood his own name."

Ian received an implant in his other ear in January. He attends an early intervention program at Child's Voice, an oral deaf school in the Chicago suburbs, and will likely be mainstreamed by second grade. He enjoys many types of noisy toys and loves to dance to the Curious George theme song.

"I never say 'Be quiet!' to Ian," says Ms. King. "We welcome all kinds of noise around here."

Cochlear implants may help children with severe to profound sensorineural loss of most etiologies including congenital, autoimmune diseases, post-chemotherapeutic and meningitic. Dr. Suskind emphasizes that early intervention is essential to the success of a cochlear implant. To refer a patient or for a physician consultation, please call (773) 702-9022 or email Dr. Suskind at dsuskind@surgery.bsd.uchicago.edu.

Pediatric Sedation Service Responds to Safety Concerns

Since Comer Children's Hospital established the Pediatric Sedation Service more than a year ago, the feedback from patients and physicians has been very rewarding.

"Safety is our primary goal." Whether children come for diagnostic tests or outpatient procedures, their families are reassured by the focused expertise of our critical care medical professionals in administering and monitoring sedation, explains Heather Fagan, MD, assistant professor of pediatrics, director of the Pediatric Sedation Service. "They also appreciate leaving within one to two hours and returning to normal activities the same day."

The Pediatric Sedation Service, a unique section of Comer Children's Hospital, is staffed by pediatric critical care physicians and nurses who are qualified experts in airway management, cardiovascular monitoring and resuscitation. They apply their expertise to children of all ages who need tests that re-

quire the child to be very still, such as MRIs (magnetic resonance imaging), CT scans (computed tomography) and ABRs (auditory brainstem response). They provide children reassurance who need procedures that would be painful without sedation. Such procedures include PICC line placements (peripherally inserted central venous catheters), lumbar punctures and bone marrow biopsies.

"Whether a patient comes to Comer Children's Hospital for an MRI or a more complex procedure, an ICU nurse personally accompanies and monitors the child throughout the process," Dr. Fagan explains. "It's a dedicated, one-on-one experience through discharge."

"Our team calls the family the day before to answer questions and give instructions related to the test," Jamie Harrison, RN,BSN, nurse manager of the Pediatric Sedation Service, adds. "On the day of the test, having taken a full history and

Research Aims for Better, More Novel Treatments for Sarcomas

Understanding the biology of soft tissue and bone sarcomas could lead to new treatments that have better outcomes and fewer side effects than chemotherapy and radiation.

"By studying the basic biology of sarcomas, we hope to develop better ways to treat them," says Stephen X. Skapek, MD, associate professor of pediatrics, director of Pediatric Oncology, and an expert in malignant solid tumors, especially bone and soft tissue sarcomas. "For example, by elucidating the molecular genetic abnormalities in sarcoma cells, we may identify proteins that are essential for sarcoma cells to grow or metastasize. These proteins could become the 'targets' of new therapeutic compounds."

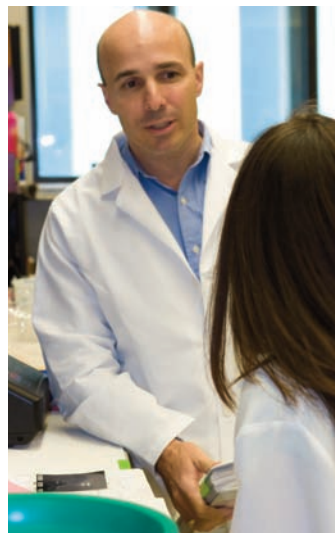
Dr. Skapek is directing several laboratory projects studying the function of genes that help prevent cancer, including sarcoma. These "tumor suppressor genes" are either mutated or inactivated in many childhood cancers, allowing uncontrolled cell growth. Scientists have found that some of these genes also play critical roles in the normal development of certain cells and organs.

One of Dr. Skapek's studies is examining the Retinoblastoma susceptibility gene (Rb), which was the first characterized tumor suppressor gene. The Rb gene protein product suppresses cancer in both children and adults, and is also essential for normal embryonic development of skeletal muscle cells and areas of the brain. Normally, people are born with two copies of the Rb gene. It has been known for some time that children born with only one normal copy of the gene will develop retinoblastoma if the second copy of the gene is damaged in a retinal cell. This occurs in close to ninety percent of these children.

In recent years, Rb protein function has been discovered to be disrupted in many other types of cancer, including rhabdomyosarcoma, a malignant tumor of skeletal muscle cells. Using experimental models, Dr. Skapek's laboratory research

team is studying how the Rb gene acts in normal development and how it blocks rhabdomyosarcoma tumor formation. If researchers can develop treatment strategies that reactivate Rb gene function in cancer cells with Rb gene mutations, the reactivated Rb protein might suppress the rhabdomyosarcoma cancer cell growth.

As an active member of the Soft Tissue Sarcoma committee of the Children's Oncology Group (COG), Dr. Skapek is also involved in the design of clinical trials for children with rhabdomyosarcoma and other types of soft tissue sarcomas.



Dr. Skapek works with a student at his University of Chicago laboratory

For example, a current soft tissue sarcoma clinical trial focuses on tailoring treatment to level of risk, with the goals of limiting toxicity for children with low-risk disease and maximizing efficacy for those with intermediate- and high-risk disease.

Treatment for sarcomas typically involves the use of multiple modalities, including surgery, radiation and/or chemotherapy. "Because sarcomas are relatively rare and

the therapy can be very complicated, the child's care must be carefully coordinated by a multidisciplinary team," says Dr. Skapek. "We will continue to increase the availability of clinical trials at the University of Chicago, so our patients have access to the newest therapies. Enrollment of patients in these trials is also vitally important to the research groups that are focused on finding better therapies for the different types of sarcomas."



Jamie Harrison, RN, BSN monitors a patient undergoing a CT scan

evaluated risk factors, we begin cardiovascular and respiratory monitoring, and then initiate IV medications to maintain a moderate level of sedation."

The dedicated Pediatric Sedation Service staff also includes a child life specialist who offers developmentally appropriate play and activities to make the child feel comfortable before and after the procedure. "After discharge," Jamie notes, "we call the next day to follow up and remain in constant communication."

"We can see that the Pediatric Sedation Service is meeting physician and family needs and giving them more confidence about pediatric sedation," Dr. Fagan says. For example, during the month of August 2006, when the unit opened, it handled almost 50 MRIs. A year later, in the month of August 2007, it handled more than 140 MRIs.

Dr. Fagan adds "The wait time for an outpatient MRI is now less than a week, and an urgent study can be done within a few hours. And, as more physicians learn of our capabilities, we are being asked to assist in an ever-widening number of important procedures for their patients. There really is no need to ever ask a child to tolerate a painful procedure again."

Bringing Pediatric Neuroscience Resources to Western Suburbs

A collaboration between University of Chicago Comer Children's Hospital and Adventist Hinsdale Hospital is bringing advanced neuroscience resources closer to home for children in the western suburbs. Beginning in March 2008, Adventist Hinsdale Hospital offers inpatient-based long-term EEG monitoring services for children with seizure disorders. Diagnostic monitoring is performed within Adventist Hinsdale Hospital's pediatric intensive care unit, and then transmitted electronically to Comer Children's Hospital for reading and analysis by University of Chicago pediatric neurologists.

Data is transmitted from Adventist Hinsdale Hospital to Comer Children's Hospital in near-real time. Comer pediatric neurologists report back to Adventist Hinsdale physicians in a timely manner with assessment of the seizure source and characteristics, and provide recommendations for therapeutic intervention. In many cases, anticonvulsant medications or vagal nerve stimulator (VNS) therapy can be used to reduce the frequency and severity of a child's seizures. Neurosurgery, if recommended, would be performed at the University of Chicago Comer Children's Hospital by experienced pediatric neurosurgeons.

The EEG equipment housed at Adventist Hinsdale Hospital is the same as equipment featured at Comer Children's Hospital.

The EEG records neurological and physiological responses, while video monitoring records the patient's physical responses during a seizure. Data is stored digitally for future reference. A DVD with the patient's EEG data is provided to the Adventist Hinsdale Hospital physician.

Children typically spend 24-72 hours in this comprehensive EEG monitoring. A parent is encouraged to remain in the child's room during the hospital stay.

This diagnostic service may be recommended for children who experience frequent and severe seizures, including cluster seizures. Monitoring can be performed on children from infants through teenagers and young adults.

Comer Hospitalists at Adventist Hinsdale Hospital

In another collaboration, pediatric hospitalists from Comer Children's Hospital now are on-site at Adventist Hinsdale Hospital 24 hours a day. Pediatric hospitalists can be a helpful resource for community pediatricians whose patients are hospitalized.

For more information about either of these services, or to refer a patient, please call Janet Barnum at (630) 856-3339.

Kids and Adults Benefit from New Approaches to Cystic Fibrosis

L'Rin Wiley was 22 months old when she was diagnosed with cystic fibrosis at the University of Chicago Medical Center. This fall 18-year-old L'Rin began college in southern Illinois to study nursing.

"Her progress reflects how much research, early diagnosis, new treatments and disease-management strategies are improving lifestyles and potential for children with cystic fibrosis," says Lucille A. Lester, MD, section chief Pediatric Pulmonary Medicine, and director of the University of Chicago Cystic Fibrosis Center.

Cystic fibrosis is an inherited genetic disease that affects the respiratory and digestive systems. Conditions associated with cystic fibrosis include lung and sinus infections, asthma, allergies, diabetes, nutritional deficiencies, and digestive and liver problems. Approximately 30,000 children and adults in the U.S. have cystic fibrosis. Early detection in infancy (or in utero) before symptoms emerge is extremely important to families, pediatricians and cystic fibrosis specialists because it can increase life expectancy. Fifty years ago the survival rate was only a few years; by 1980 the life expectancy increased to 15 years of age. Today, the median survival age is 37 years.

"Ever since our Cystic Fibrosis Center was established 40 years ago, we have been diagnosing and treating children in infancy through their adult years, helping them meet the ongoing challenges of cystic fibrosis and live rewarding lives," Dr. Lester says. "Our multi-disciplinary team is experienced in addressing every issue that

occurs throughout the life span of cystic fibrosis patients, from genetic and newborn screening to lung transplants."

"Our adult CF program is well established," Dr. Lester says. "and, transitioning from the pediatric cystic fibrosis clinic to the adult clinic and, if necessary, the inpatient area is made easier because both are in the same University of Chicago Medical Center complex."

Jeannine Cheatham, RN, MS, CCNS/APN, has been on the University of Chicago Medical Center's cystic fibrosis team for 17 years. "It's a big plus working at a teaching hospital and being on top of the latest information," she says. "When we see even a subtle change in a patient, we have the on-site expertise of many specialists who ensure timely treatment."

"Our Cystic Fibrosis Center has developed a systematic approach to identifying early signs of worsening lung status," Cheatham says, "and we are quick to recommend a more aggressive treatment, such as IV antibiotics, which can be done during an inpatient stay or on an outpatient basis."

For example, the University of Chicago CF Center uses new techniques of airway clearance and new drugs, such as inhaled Pulmozyme (a mucolytic agent) and Hypertonic Saline, as well as chronic macrolide oral therapy, which helps patients be well at home so they don't have to be hospitalized.

The medical team does not accept children being underweight or

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undernourished as part of “what it means to have CF.” An individualized treatment plan is developed for each child, in consultation with Comer Children’s Hospital CF dietitians, to aggressively improve nutritional status. The approach can include oral supplements or even surgical placement of a G tube for nighttime supplemental feeding.

When Cheatham first started her career at the Cystic Fibrosis Center, teens were often very sick. “Today, I’m going to more weddings than funerals, she says. “Our oldest patient, now followed in our adult CF clinic, is in his 50s and is discussing his options for retirement. L’Rin is a great example of how we have progressed. She’s so positive and doesn’t let cystic fibrosis define or limit her future prospects.”

L’Rin is doing well despite facing most of cystic fibrosis’s complications. “It’s hard, but my parents are always there for support, and my doctors at the University of Chicago Medical Center work with me and encourage me in every way,” she says. “Dr. Lester is the best ever, and I’m participating in one of her clinical trials.”

“I’ve learned,” L’Rin adds, “to manage and deal with CF and not allow it to inhibit me. I love swimming, I was on the track team and was a cheerleader, and I went to football and basketball games. I feel independent and am looking forward to college...and maybe some swimming or softball.”

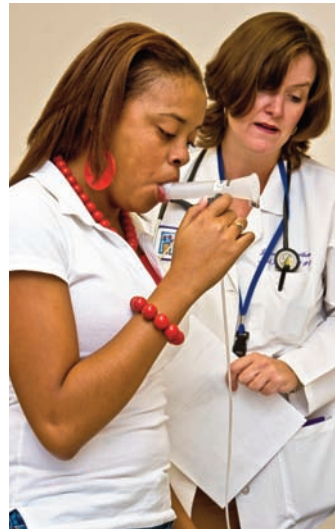
As part of managing her CF, L’Rin decided to have a central IV line (Portacath device) inserted to help deliver antibiotics when necessary to address bacterial infections. Like other patients, she also administers insulin for her diabetes. “Our Cystic Fibrosis Center has its own Diabetes Clinic that treats CF patients,” Cheatham says. “This is particularly important because patients with CF have unique diabetes issues.”

The University of Chicago Medical Center also systematically screens CF patients for diabetes starting at ages 10 to 12 and earlier if they are failing to gain weight. An early diagnosis of diabetes allows for appropriate treatment which can be a great boon to improving the overall prognosis.

Research by Dr. Lester has found that CF diabetes is a more fre-

quent complication in African-American patients with CF, a finding that will be further investigated nationally.

As a Cystic Fibrosis Foundation-accredited center and as an internationally recognized medical and research center, the University of Chicago Medical Center offers patients comprehensive care and support. “This includes ongoing consultation with a patient’s primary care pediatrician,” Dr. Lester says.



Jeannine Cheatham, RN, MS, CCNS/APN, administers a series of tests at L’Rin’s most recent visit

Dr. Lester also heads the University of Chicago Medical Center’s section for Pediatric Pulmonary Medicine, and is nationally recognized for her expertise in pulmonary diseases in children. She has written clinical articles and book chapters, and has delivered presentations to professionals including the North American CF Conference.

“Our Cystic Fibrosis Center has participated in multi-center clinical trials for many new therapies, such as mucolytic agents and inhaled antibiotics that have contributed to improved survival,” Dr. Lester says.

“We are all dedicated to finding a cure for cystic fibrosis.” Dr. Lester adds, “I’m inspired by three photos in my office, each of a different set of twins. The twins’ mothers have cystic fibrosis, and I cared for them at one time. One mom is in her upper 40s, another in her 30s, and the third mom of twins is in her 20s. Now that’s progress.”

To refer a patient or for a physician consultation, please call (773) 702-6178.

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Protective Services expert does not evaluate the majority of the abuse cases; yet, the police, child welfare agencies, and the court system rely on the medical profession to identify or rule out child maltreatment. In 1994, the University of Chicago Comer Children’s Hospital Child Protective Services developed a model that mandates expert medical review in the assessment of abuse and neglect for children under the age of three. This input helps child welfare agencies make better, more timely decisions in cases both founded and unfounded. Initially based at the University of Chicago Comer Children’s Hospital, the program has partnered with the Chicago Police Department, the Illinois Department of Children and Family Services, the Chicago Children’s Advocacy Center and includes two additional Chicago area hospitals.

Dr. Glick envisions a network of Child Protective Services “centers of excellence” in hospitals throughout the state of Illinois. Each center would have a medical expert working as part of a multidis-

ciplinary team reviewing each suspected case. For the medical profession to take the lead in creating these centers, more doctors must be well versed in this complex area. The American Board of Pediatrics now recognizes Child Abuse as a pediatric subspecialty. A board certification in Child Abuse will be offered in 2009, also the University of Chicago Pritzker School of Medicine includes a rotation through Child Protective Services during pediatric residency. The doctor-in-training is exposed to the medical team’s work, the police interrogation, the DCFS investigation, and the legal proceedings. “Pediatricians are well respected in the community,” says Dr. Glick. “If we become more outspoken advocates for these vulnerable children, society will listen.” The University of Chicago Comer Children’s Hospital Child Protective Services is available to consult with pediatricians on issues of abuse and neglect. Additionally, the staff provides training and education for health professionals. For more information, please call 773-702-4900.

Expert Medical Review Key to Assessment of Child Abuse and Neglect

Case 1: “Mimi” An Illinois Department of Children and Family Services (DCFS) caseworker brought 2-year-old “Mimi” to the University of Chicago Comer Children’s Hospital Emergency Room for assessment because the little girl was failing to thrive and “just didn’t look well.” Previous physicians attributed her condition to prenatal cocaine exposure.

Case 2: “Taylor” 10-month-old “Taylor” was seen at a community hospital emergency because her mother noticed the baby had difficulty moving her arm. X-rays showed swelling and a possible fracture. Doctors suspected abuse and alerted DCFS; however “Taylor” was sent home and her mother was given instructions to consult an orthopedic surgeon. Still concerned, the mother next brought her daughter to the University of Chicago Comer Children’s Hospital emergency room.

Are these cases of child abuse or child neglect? Jill Chapman Glick, MD, medical director of Child Protective Services at the University of Chicago Comer Children’s Hospital, believes that all pediatricians should be educated and trained to apply scientific evidence to possible child abuse or neglect cases. “There’s a body of scientific knowledge unique to the issue,” says Dr. Glick. “It is just too commonplace a problem to not have pediatricians knowledgeable in the care and protection of these children and their families.” **Case 1:** “Mimi” Upon examination, Dr. Glick and the Child Protective Services team observed that “Mimi” had clubbing

of her fingernails in addition to other conditions not consistent with child abuse. After extensive testing, the diagnosis was that “Mimi” suffered from surfactant deficiency, a serious pulmonary disease. Thankfully, she was neither a victim of neglect or abuse, and was able to receive treatment while remaining with her foster mother.

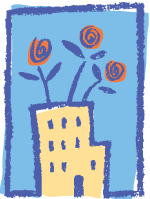


Case 2: Dr. Glick and the Child Protective Services team examined “Taylor” and performed a full evaluation including symptoms, medical history, social history, and a skeletal survey to check for occult fractures. The skeletal survey revealed multiple rib fractures, and the mother was informed that “Taylor’s” injuries were indicative of child abuse. She readily agreed to work with DCFS and the police to ensure her daughter’s safety. Child abuse is the 4th leading cause of death for children in the United States. In 2007 of the 139,000 cases reported in Illinois each year, 50% are in the Chicago area. A Child

Jill Glick, MD, cares for a young patient in the Comer Children’s Hospital ER

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