FREE VIDEO SERIES FOR PARENTS

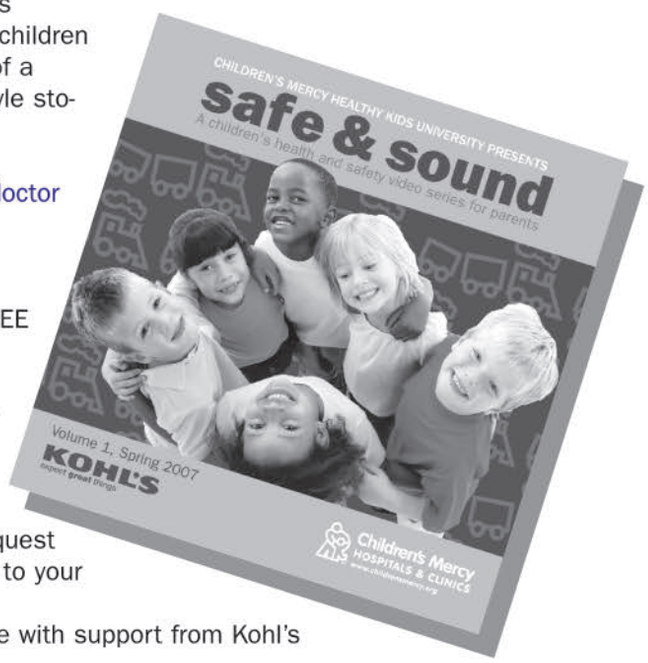
Children's Mercy's Safe & Sound: A Children's Health and Safety Video Series for Parents on DVD, is now available.

Each video segment on the DVD features Children's Mercy experts and some of the children and families we serve. The DVD, the first of a planned quarterly series, features news-style stories on:

- preventing sports injuries
- preparing your child for a visit to the doctor
- early childhood vision testing
- allergy tests
- balancing your child's diet

You can download stories or request a copy of the DVD at www.childrensmercy.org

The Safe & Sound DVD is being sent FREE of charge to all subscribers of the Safe & Sound magazine. In addition, visitors to the Children's Mercy's Web site—www.childrensmercy.org—can either download the stories or request a copy of the DVD, which will be mailed to them FREE as well! You may also visit our Web site to request copies of the Safe and Sound DVD to give to your patients (while supplies last).



The Safe & Sound DVD is made possible with support from Kohl's department stores.

Physician's Update is produced monthly by Community Relations and Physician Services. For more information, contact:

SHAWN ARNI
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SARNI@CMH.EDU.

RUTH DUBYEL
(816) 983-6582
RTDUBYEL@CMH.EDU

DID YOU KNOW?

Currently, anyone can access abbreviated forms of Clinical Practice Guidelines via our Web site at www.childrensmery.org. Physicians who are members of the Children's Mercy medical staff or belong to Children's Mercy Health Network may access complete CPGs. To request a user name and password, contact Ruth Dubyel, (816) 983-6582, or e-mail rtdubyel@cmh.edu.

VISIT THE CHILDREN'S MERCY WEB SITE: WWW.CHILDRENSMERCY.ORG

Children's Mercy HOSPITALS & CLINICS℠
www.childrensmercy.org

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CHILDREN'S MERCY HOSPITALS AND CLINICS

physician's update

April 2007

After 16 years of questions and no answers, Jenny Ray finally found hope for a normal life.

Children's Mercy HOSPITALS & CLINICS
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2401 Gillham Road
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JENNY RAY'S RAY OF HOPE

A 16-YEAR ROLLER COASTER OF HOPE AND FEAR … FINALLY SUCCESS

A baffling neuromuscular disease held a family hostage for 16 years before a Children's Mercy specialist took a chance that today provides hope of a normal life for 17-year-old Jenny Ray McGee.

When Jenny Ray was an infant, doctors were confounded by her condition. They told her parents, Debbie and Mike, that she would not live long. She could not eat, sit up, or hold her head up.

Physicians from Children's Mercy, the Mayo Clinic, and Washington University in St. Louis were all only able to provide temporary relief.

Jenny Ray had several diagnoses over the years. And yet, her muscular weakness and lack of energy kept overpowering the medicine and the transfusions she was receiving. She spent much of her time in a wheelchair and in braces.

In late 2005, Jenny Ray and her family went to Children's Mercy Hospital to see William Graf, MD, Chief of Neurology and Professor of Pediatrics at UMKC School of Medicine. He suspected Dopa Responsive Dystonia (DRD). He was right.

DRD is a condition that usually begins in childhood or adolescence with progressive difficulty in walking and, in some paces, spasticity. Other symptoms can include developmental motor delay, tremors, muscle stiffness, abnormal tongue and mouth movements and Parkinsonian symptoms.

DRD often mimics other conditions (such as muscular dystrophy or cerebral palsy) so it is difficult to diagnose. The diagnosis of DRD is made after treatment, not before.

"As physicians, we're used to making a diagnosis, then offering a treatment," says Dr. Graf. "But in this case, you give the medication – it does no harm to administer it – and if it is successful, you know you've found what it is."

In the case of Jenny Ray, the effect was both immediate and amazing. The year 2006 was one of intense physical and psychological therapy, but today, the trials and tribulations that so defined her life and her family's life for 16 years seem to be behind them.

When she graduates from high school this spring, Jenny Ray hopes to begin a journey through medical school and specialty training to become a pediatric neurologist.

FOR MORE INFORMATION ON NEUROLOGY SERVICES AT CHILDREN'S MERCY, CALL THE NEUROLOGY CLINIC AT (816) 234-3490.

NEWS **BRIEFS**

Vice Chairs

The Department of Pediatrics, under the leadership of Kevin Kelly, MD, has installed a group of physicians in the roles of Associate and Vice Chairs to help him in the ongoing efforts of improving and maintaining the high functioning of the many departmental tasks.

- Laura Fitzmaurice, MD – Associate Chair of Clinical Affairs
- Gregory Kearns, PharmD, PhD – Associate Chair of Research
- Jane Knapp, MD – Associate Chair of Education
- William Truog, MD – Vice Chair of Faculty Development
- Bradley Warady, MD – Associate Chair of Academic Affairs

Upcoming CME

Springfield Pediatric Specialty Care Update
Sat., April 14
University Plaza Hotel
Springfield, MO

Transport Conference
June 7-9
Westin Crown Center Hotel
Kansas City, MO

3rd Annual Midwest Dermatology Symposium
Sat., Sept. 29
Children's Mercy Hospital
Kansas City, MO

Clinical Advances in Pediatrics
Nov. 14-16
Children's Mercy Hospital
Kansas City, MO

For more information, please visit our Web site at www.childrensmercy.org and click on Health Care Professionals.

NEW **DOCTORS**

Robert C. Beckerman, MD, FAAP, FCCP

Pulmonology
(816) 234-3033

MD Degree: Jefferson Medical College, Philadelphia, PA 1972
Residency: Pediatrics, Children's Hospital Medical Center, Cincinnati, OH
Fellowships: Developmental Disabilities, Children's Hospital Medical Center, Cincinnati, OH; Pediatric Pulmonology, University of Arizona Health Sciences Center, Tucson, AZ
Certifications: Pediatrics, 1978; Pediatric Pulmonology, 1986, 1995, 2003
Specialty Interests: Pediatric pulmonology and sleep disorders, neuromuscular disorders (respiratory), respiratory control, SIDS – forensics, care of the high risk post-neonate, cystic fibrosis, asthma

Richard A Hopkins, MD, FACS, FACC

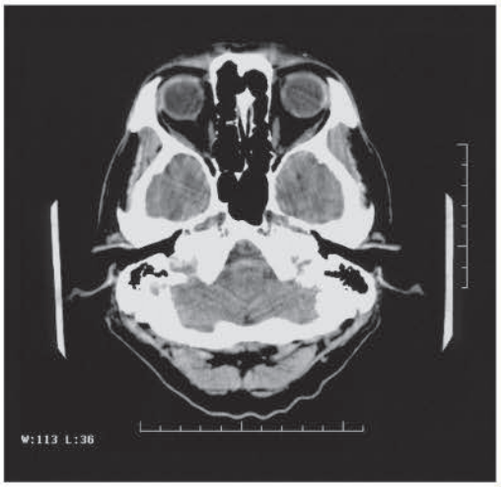
Cardiothoracic Surgery
(816) 234-3519 or
(816) 234-3580

MD Degree: Duke University School of Medicine, Durham, NC 1974
Residency: General and Cardiovascular–Thoracic Surgery, Duke University Medical Center, Durham, NC
Fellowship: Congenital Cardiac Surgery, Great Ormand Street Hospital for Sick Children, London, England
Certifications: Cardiothoracic Surgery, 1987, 1997, 2006; General Surgery, 1986
Specialty Interests: ongenital cardiac surgery (pediatric & adult), reconstructive cardiac surgery, valve salvage, valve repairs, structural heart disease, autografts, allografts, homografts, complex cardiac reconstructions, valve transplants, cell, gene, and tissue engineering, bioengineered personal heart valve

CLINICAL UPDATE: **EPILEPSY TREATMENT**

Seizures are the most common serious neurological problem affecting children with neurological disorders. Incidence approaches two percent for febrile seizures, and one percent in other types of epileptic seizures.

Seizures occur due to decreased neuronal inhibition or increased excitation. Etiology varies with age. Common causes in neonates and infants are perinatal brain injury, congenital central nervous system malformations, and metabolic derangements. Central nervous system infection, genetic epilepsies, and neurodegenerative disorders are more likely to present with seizures beginning in later childhood. Sixty-seven percent of patients with epilepsy are idiopathic or cryptogenic, while an underlying structural or metabolic brain abnormality is the cause for 33 percent.



The International League against Epilepsy (ILAE) subdivides seizures into two main groups: generalized and partial. Generalized seizures show generalized hypersynchronus excitability of the cortical neurons with EEG showing generalized changes in the vast majority of patients. They are further classified as Tonic, Clonic, Tonic/Clonic, Myoclonic, Atonic, Absence, and Spasms.

Partial seizures show focal cortical hypersynchronus excitability with changes on EEG in only 20-40 percent of patients. These are further subdivided into Simple (preserved level of consciousness) and Complex (altered level of consciousness.) Partial seizures can be sensory or motor in nature. Symptoms depend on the focus of origin.

EEG is used to help confirm the seizure type and identify a need for further testing such as brain imaging. MRI brain, metabolic, and genetic workup are determined based on the clinical presentation.

Common first line treatments for partial seizures include Carbamazepine, oxcarbazepine, levetiracetam, Phenytoin and Lamotrogine. For generalized seizures, Valproic acid, Zonisamide, Topiramate, ethosuximide are among common medicines. Others, such as Phenobarbital, Felbamate, and Benzodiazepines can be used in both.

To refer a patient to the Children's Mercy Acute Neurology Clinic (formerly First Seizure Clinic), call (816) 234-3490.

AHMED ABDELMOITY, MD
CHILDREN'S MERCY HOSPITAL, NEUROLOGY
ASSOCIATE PROFESSOR OF PEDIATRICS, UMKC

HOT TOPIC: ADOLESCENT IMMUNIZATIONS

As days grow longer and flowers begin to bloom, families anticipate the return of summer with visits to their healthcare providers for camp and sports physicals. These visits allow great opportunities for providers to ensure that immunizations are updated, particularly among adolescents. Recent changes to the recommended childhood and adolescent immunization schedule have emphasized adolescent immunizations.

The quadrivalent human papillomavirus (HPV) vaccine was licensed in 2006. Routine vaccination with three doses of HPV vaccine for females 11-12 years of age and catch-up vaccination for females 13-26 years of age is now recommended. The second and third doses of HPV vaccine are administered 2 and 6 months after the first dose.

Licensure of two new tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccines in 2005 led to recommendations in 2006 for pertussis immunizations among adolescents. A single dose of Tdap is recommended instead of Td vaccine for booster immunization among adolescents 11 to 18 years of age. An interval of at least five years between Td and Tdap is suggested to reduce reactions but an interval as short as two years is acceptable.

A new tetravalent meningococcal conjugate vaccine, protecting against serogroup A, C, Y, and W-135, was also licensed in 2005. Routine immunization of adolescents at 11 to 12 years and at 15 years of age or high school entry was recommended subsequently, with an eventual goal of routine immunization of all adolescents.

Additional recommendations over the past year include routine administration of two doses of varicella-containing vaccine for all children below 13 years of age. A second dose catch-up for adolescents and two doses of varicella vaccine for adolescents without immunity are included. Hepatitis A vaccine is now also recommended routinely and includes catch-up vaccination of unvaccinated children and adolescents.

DENISE BRATCHER, DO
INFECTIOUS DISEASES
ASSOCIATE PROFESSOR OF PEDIATRICS, UMKC