Welcome back to Pediatric Pulse, the Kentucky Children’s Hospital newsletter for referring physicians. In this quarterly newsletter we provide updates on Kentucky Children’s Hospital in addition to information on new or interesting services we offer.

As the winter surge of RSV and flu patients decreases, I want to thank all of our referring providers for your understanding if you experienced delays in referrals for inpatient admissions. We experienced considerable strain on our PICU beds, and at times on the ward beds. However, except for a very few instances, we were able to meet our goal of never saying no to inpatient referrals. Once again, thank you.

Work has started on the new fourth floor Welcome Center, sponsored by the Makenna Foundation. Visitors might experience some inconveniences during the remodeling, but they will be minimal. Work should be complete by the end of May. This is just one of many initiatives to make KCH a more inviting place for families and visitors.

Soon after this construction starts we will also begin work on the new Child Life Center sponsored by the Log a Load for Kids group. We just received the OK from the board to begin design work on upgrading the rooms. Exciting times are happening at KCH.

In this issue, James Liau, MD, will review pediatric facial trauma. We will also hear from Lars Wagner, MD, our new chief of pediatric hematology/oncology, about our services and some new initiatives in that division.

In the next issue, we will introduce you to new staff at KCH. These will include a metabolic/genetics specialist, a development/behavioral specialist, a pediatric rheumatologist, three critical care providers and three neonatologists, along with an additional pediatric infectious disease specialist and a palliative care physician. Your liaisons will keep you up to date on the arrivals.

I continue to remind you that numerous Kentucky Children’s Hospital records are now available through the UK Physician Portal. The most utilized information to date is the online discharge notes from the newborn nursery and units, along with lab results and procedural notes. More and more daily progress notes are also becoming available online. Our liaisons will be glad to show you or your office staff how to access the portal.

I also urge you to contact me if we have messed up or not served you or your patient well. In my experience, most issues revolve around communication problems, and a quick call may help correct things. If you need to contact me, you may do so at 859-323-1432 or 859-323-8511, or call UK•MDs at 800-888-5533 to page me. My email address is cwall4@uky.edu.

Carmel Wallace, MD
Physician-in-Chief, Kentucky Children’s Hospital; Chair, Department of Pediatrics
Jacqueline A. Noonan-CMN Research Chair in Pediatrics
Pediatric Pulse

Lars Wagner, MD  
Chief, DanceBlue Kentucky Children’s Hospital Pediatric Hematology/Oncology Clinic

Sarcomas are cancers of connective tissues such as bone and muscle. Collectively, they account for nearly one in every six pediatric cancers. Although more common sarcomas such as rhabdomyosarcoma and osteosarcoma are familiar to pediatricians, there are at least 20 other sarcoma types that may be seen in children, making this a very heterogeneous group of tumors.

Multidisciplinary involvement is the cornerstone of effective treatment of pediatric sarcoma, as the diagnosis and management of these tumors is often quite complex. Molecular genetic testing on tumor tissue is often necessary to accurately diagnose these malignancies. Once the diagnosis is established, a comprehensive radiographic evaluation is necessary for thorough staging.

Based on this information, a treatment plan is constructed that involves surgery, chemotherapy and often radiotherapy.

UK now has a critical mass of specialists to care for pediatric sarcoma patients and direct national clinical trials for the treatment of pediatric sarcoma. Patrick O’Donnell, MD, is a fellowship-trained orthopaedic oncologist who specializes in musculoskeletal tumors, and now complicated surgeries may be performed here in Lexington rather than having patients travel to Nashville or other centers.

Jonathan Feddock, MD, is a radiotherapist with special expertise in pediatrics. He helps develop treatment plans that are sensitive to the special long-term toxicities that can be seen in children.

Key personnel in these disciplines, as well as in pathology and radiology, are now reviewing cases together at comprehensive tumor boards where they develop therapeutic plans. These meetings are essential for integration of care, and they allow each case to be critically and thoroughly analyzed. These changes lead not only to further academic collaboration, but most importantly to high-quality patient care.

Finally, because the age distribution of pediatric-type sarcomas such as osteosarcoma and Ewing’s sarcoma does not arbitrarily cap off at 18 years, we have expanded our services to direct the care of young adults in their 20s with these tumors. There is growing evidence that pediatric-type cancers occurring in older patients are best cared for using pediatric-treatment protocols, so we are extending this multidisciplinary approach to these young adults. They receive outpatient treatment in our pediatric clinic and inpatient care at the Markey Cancer Center.
KCH and Lexington Shriners Hospital: Growing the relationship to benefit the children of Kentucky

Ryan Muchow, MD
Pediatric orthopaedics

While the pediatric orthopaedic surgeons at Kentucky Children’s Hospital have always been jointly positioned at the Lexington Shriners Hospital for Children, that partnership is expanding.

Lexington Shriners Hospital is planning to build a new outpatient orthopaedic center on UK’s medical campus. The inpatient care of children with orthopaedic conditions will occur at KCH.

A central location and exceptional facilities will enhance the experience of the pediatric orthopaedic patient and complement the world-class care currently provided by our team of surgeons. The staff surgeons at Shriners Hospital and KCH are all fellowship-trained in pediatric orthopaedic surgery and provide comprehensive care of the pediatric orthopaedic patient.

Their areas of specialty include common orthopaedic conditions such as hip dysplasia, clubfoot, scoliosis and fracture care. Their work spans the entirety of pediatric orthopaedics to include complex spinal deformity, limb deformity, adolescent hip preservation and rare conditions of development. Upper extremity specialists focus solely on congenital and traumatic disorders of the arm.

The staff surgeons are advancing the orthopaedic care of children through leading-edge research in many areas, including scoliosis, clubfoot, Legg-Calve-Perthes disease, vitamin D deficiency, tissue engineering and complex hand conditions. The staff has more than 100 combined years of experience and maintains leadership positions in national and international organizations.

The move to UK’s medical campus will allow greater collaboration between our team of pediatric orthopaedic specialists and their colleagues who help care for the patients’ associated medical conditions. The KCH team of pediatric anesthesiologists focuses on child-friendly anesthesia and is well equipped to handle the complex medical conditions often accompanying the orthopaedic diagnosis. Further, KCH provides a full complement of pediatric subspecialty care.

Shriners Hospital for Children and KCH are excited to be growing closer, not only in location, but also in vision and purpose to provide exceptional care to the children and families of Kentucky and the region. Physicians and families can make an appointment by calling 859-323-5533 (UK Orthopaedics) or 859-268-5675 (Lexington Shriners Hospital).

KCH and Shriners Orthopaedic team

Chip Iwinski, MD
Todd Milbrandt, MD
Kit Montgomery, MD
Ryan Muchow, MD
Scott Riley, MD
Vish Talwalkar, MD
Janet Walker, MD
As the weather gets better and the days get longer, we are outside more enjoying the sun and fun. Unfortunately, with more outdoor activities, there are more accidents resulting in facial injuries.

Most facial trauma can be successfully treated by an emergency room physician. As a pediatric plastic surgeon, I usually do not get involved unless there is significant soft tissue injury or facial skeletal injury. The appropriate initial diagnosis and treatment of facial trauma usually dictates the outcome. Should there be any doubt or question as to management or treatment, consultation with a pediatric plastic surgeon can help.

Following are some of the most common facial traumas:

**Facial trauma**

Facial trauma can involve soft tissue, bone or both. The key with pediatric facial trauma is the consideration and expertise in facial growth, and this is especially important with bone injury.

**Soft tissue facial trauma**

This is by far the most common. Scalp, forehead and chin lacerations can usually be taken care of by the emergency room physician. However, when the laceration involves cosmetically sensitive areas, such as around the eyes or into the eyelid, nose, lips or ears, this warrants a consultation with a facial trauma surgeon.

If the soft tissue damage extends beyond a simple laceration and involves crushed or missing tissue, then consultation with a pediatric plastic surgeon is a good idea since long-term follow-up, and possibly revision procedures, will be necessary for an optimal outcome.

**Craniofacial bone trauma**

With current usage of CT scans, diagnosis of both mandible and facial trauma is relatively straightforward. Although X-rays and ultrasound have their roles, a CT scan allows both diagnosis and treatment planning with one imaging procedure.

The majority of facial fractures occur during daily activities, such as playing sports or biking. Helmets and car seats have dramatically cut down on skull fractures and the need for surgical intervention.

For children 16 and younger, nasal fractures are the most common, with mandible fractures being No. 2. Midface fractures and skull fractures are less common because of the variability of facial maturation, facial fat padding and growth. Maxillary and frontal sinuses form later in life, and this delayed growth, along with the overall ratio of mandible to midface, makes the mandible more breakable.

That being said, when there are fractures in the upper jaw, around the orbits or in the forehead bones, there must be thorough investigation of injuries to the base of the skull or brain trauma. Those areas are harmed only by large force, and other associated injuries need to be ruled out.

Orbit fractures tend to be less common, however “trapdoor” requires discussion. This is when the floor of the orbit breaks but then snaps back into place because young bone is much more flexible. When this happens, one of the muscles controlling eye movement can get caught in this trapdoor, resulting in an eye that won’t move.

The best test is to ask the child to roll his or her eye upward. If this causes a lot of pain and/or nausea, then this is a trapdoor fracture with an entrapped eye muscle. This is an emergency requiring an immediate operation by a surgeon experienced in facial fractures.

Facial trauma is common, and when it involves bone and soft tissue, the injury can be overwhelming to the parents and child. Especially with children, the goal goes beyond damage control and transitions into reconstructive management. Initial diagnosis and treatment is key for obtaining the best outcomes, and long-term management with follow-up care by the pediatric plastic surgeon will guarantee this occurs.
Summer trauma season is here

School is out, pools are open and the world is a playground. What a wonderful time to be a kid!

Unfortunately, summertime also brings a dramatic increase in childhood injuries.

Top childhood injury risk areas in the summer include:
- Drowning
- Bike and wheeled-sports injuries
- Falls
- Motor vehicle-related injuries
- Pedestrian injuries

Simple summertime safety tips:
- Actively supervise children when engaging in summertime activities such as swimming and playing on playgrounds and in backyards.
- Home pools should be surrounded on all sides by a fence at least 4 feet high with self-closing gates and equipped with an anti-entrapment drain cover.
- Create safe play areas at home.
- Provide at least 12 inches of safe surfacing, such as mulch, shredded rubber or fine sand, extending at least 6 feet in all directions around equipment.
- Remove potential hazards such as lawn equipment and pesticides from the area.
- Keep children away from the grill and outdoor cooking areas.
- Use appropriate safety gear for children’s activities.
- Wear a helmet for wheeled sports and sporting activities.
- Wear a life jacket for open water swimming and boating.
- Buckle up children in the back seat using a booster or child safety seat as appropriate while traveling.
- Teach and demonstrate to children the importance of being a safe pedestrian, such as crossing at crosswalks and looking both ways before crossing the street.
- On both sunny and cloudy days, use a sunscreen with an SPF 15 or greater that protects against UVA and UVB rays.
- Enjoy displays of fireworks conducted by trained professionals and leave the handling of dangerous materials to the experts.

For more information on how to stay safe this summer:
Visit our website www.safekidsfayettecounty.com
Follow us on Facebook.

Community Corner

Join us for the next Community Wide Morning Report
Wednesday, Sept. 18, 2013
Wheeler Room – MN136

For more information or to register, contact Tarra Crane Lowe at tarra.crane@uky.edu or 859-257-5736.

Please send me an email if you have suggestions for upcoming conferences. Also, I would appreciate any suggestions related to Community Pediatrics at UK.

Katrina Hood, M.D.
Chief, Division of Community Pediatrics
khood@paalex.com
Nephrology clinic now offered in Mount Vernon

Kentucky Children’s Hospital’s pediatric nephrologists Stefan Kiessling, MD, and Aftab Chishti, MD, are now seeing patients in the Medical Arts Building at Rockcastle Regional Hospital.

Clinic day: Second and fourth Thursday of every month
Clinic hours: 9 a.m. – 3 p.m.

To refer a patient, call 866-940-4938 (toll free).

The Association of Air Medical Services

We are honored that Scottie B. Day, MD, Kentucky Children’s Hospital critical care medicine physician and medical director of pediatric transport and outreach, has been invited to speak at the Association of Air Medical Services annual conference Oct. 21-23 at the Virginia Beach Convention Center, Virginia Beach, Va.

The Air Medical Transport Conference is designed to provide leadership, educate, inform and supply up-to-the-minute information on the latest techniques and innovative approaches to emergency medical transport practice from the experts in your field. It is THE conference in the air and ground medical transport field with more than 2,500 emergency medical and critical care professionals attending.