



# Children's Center News

Sutter Medical Center, Sacramento

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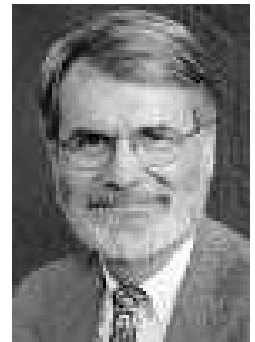
**\*\*Inquiries regarding our  
Children's Center Newsletter  
may be directed to Nancy  
Hayden at 916-733-8441.**

### *From Our Co-Editor, Stephen Butler, M.D.*

Where will the next generation of Andy Wertz, Cliff Marr, Andy Juris and Dave Smith come from? In addition to their superb clinical abilities, these physicians had a vision for the delivery of state-of-the-art, pediatric care in a community, patient and family friendly environment.

Our author for this edition of the newsletter allays some of my fears. Roy Rubin, M.D., a pediatric orthopedic surgeon, has been at the Children's Center for the last several years. His article details one of his special areas of interest, i.e., sports-related injuries. His interest here is more than intellectual since he was an intercollegiate athlete as an undergraduate at Princeton. He attended medical school at Temple and did his internship in general surgery and residency in orthopedics at Duke. Roy completed his training in pediatric orthopedics at UCD and Shriners.

I hope you'll agree that as long as we are attracting new young physicians like Roy, the Children's Center will continue to do well and expand.



## **Awareness of Sports Injuries in Kids Can Lead to Prevention**

*By Roy Rubin, M.D.*



I see many types of orthopedic problems affecting kids, including clubfoot, hip dysplasia, scoliosis, tumors, fractures, infections, cerebral palsy, gait abnormalities and a multitude of other pathologies. But, because more kids are playing sports these days, we're also seeing more injuries from children and teenagers who play sports.

Many injuries could be prevented by having an awareness of the types of injuries children can receive by playing their particular sport, and then taking preventative action. However, children who play sports are more prone to certain injuries, and they and their parents should know what risks they're taking when they play sports. These are some of the more common problems I see in this day and age.

Many sports have injuries specific to that sport. For example, spondylolysis, which is a stress fracture in the spine, usually at the L5 vertebrae, is commonly seen in gymnasts and football linemen as a result of the repetitive hyperextension forces that these athletes face. Spondylolysis is diagnosed with oblique lumbar X-rays and a SPECT scan and treated with a Boston Overlap Brace and activity restriction for three months. I have treated many kids with this regimen and have observed a 100 percent success rate.

Football players tend to fracture their fingers. Sometimes these fractures will involve the growth plate (typically a Salter Harris II fracture), but rarely do they result in growth arrest. The first question I usually get is, "When can I go back to play? There

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are only so many weeks left in the season.” This decision is individualized based on the fracture, the age of the patient, the child’s commitment to the sport, and the ability to use a custom splint. I pay particular attention to juniors in high school who are being actively recruited to colleges. I try to get them back to play as soon as possible.

Football players can also suffer long bone fractures. In skeletally immature patients, these can often be treated nicely with flexible intramedullary nails.

Motocross racers can get any type of fracture. They are repeat customers, as they tend to be addicted to their sport and are little deterred by previous injuries. They can be very high-energy injuries, and should be respected as such. I had a 14-year-old boy who had a both-bone forearm fracture as a result of a motocross racing accident. He was screaming in pain, he had a compartment syndrome, I did emergent fasciotomies and, luckily, he has regained use of his upper extremity.

Baseball players — particularly pitchers — tend to be afflicted with shoulder and elbow problems. In the elbow, medial epicondyle avulsion fractures can occur as a result of a throwing motion, and may be associated with a feeling of a “pop.” These can usually be treated nonoperatively with immobilization for two to three weeks.

Little League Shoulder is a painful overuse injury to the shoulder where the proximal humerus growth plate becomes abnormally widened. Treatment is rest for two to three months followed by a rehab program emphasizing proper throwing technique (control, not speed). Similarly, Little League Elbow affects the medial epicondyle and should be treated with two to four weeks of rest followed by rehab. In an effort to curb these overuse injuries in young baseball players, the American Academy of Orthopedic Surgeons has developed guidelines for the number of pitches per game and number of games per week. A good rule of thumb is less than 50 pitches per game in an 8-year-old and less than 100 pitches per game in an 18-year-old, and not more than two games per week.

Baseball players and swimmers may get shoulder internal impingement, in which overuse causes subtle instability which can, in turn, lead to rotator cuff tendonitis. This is best treated with a good rehab program, emphasizing shoulder strengthening and, in the case of baseball, instruction on throwing mechanics. Occasionally, surgery is indicated, but a formal subacromial decompression is not usually helpful in skeletally immature athletes.

Up to 7 percent of hockey players can have a shoulder dislocation as a result of a collision. Shoulder dislocations should be treated by immediate reduction and, after a brief period of immobilization in a sling (three weeks), rehabilitation. There is a high chance of recurrence, which should be treated with surgical stabilization (Bankart procedure).

Basketball players and soccer players have a high incidence of ACL tears. These are more common in the young female athlete than in the young male athlete. There is a growing body of evidence that these can be prevented in young female athletes by proper training (for example, landing with proper technique after a jump). Ninety-five percent of patients who experience a pop and swelling of the knee have had an ACL tear. Physical exam maneuvers to detect an ACL tear are the Lachman and pivot shift tests. Young athletes who have a ruptured ACL are generally indicated for reconstruction. There are three common methods to reconstruct the ACL: “bone-patella-bone,” hamstring autograft and allograft. Each has its advantages and disadvantages, and much is based on surgeon preference. I prefer allograft, due to the lack of donor site morbidity.

I recently treated a cheerleader for an injury. During a cheer routine, she jumped off of another cheerleader’s shoulders and was supposed to land on another cheerleader but instead went head first into the ground. She suffered an upper cervical spine injury (dens fracture). Fortunately, she is neurologically intact. She was placed into a halo and has healed uneventfully after two months.

In summary, a wide variety of injuries is possible with kids playing sports. Many sports have predilections for specific injuries, and an awareness of these injury patterns is important. Emphasis is placed on prevention, recognition and treatment.

## **Children’s Center Joins Together for Kids to Meet Growing Needs in Children’s Health**

The Children’s Center at Sutter Medical Center, Sacramento announced Sept. 26 its involvement in a new nonprofit organization, Together for Kids™, which will raise funds nationally to help SMCS and other member hospitals cope with dramatic increases in children’s health needs.

“The children of the Sacramento-Sierra region and all across America are facing many challenges that adversely impact their health and well-being; among them are obesity, accidental injuries and lack of health insurance,” said Gregory Janos, M.D., medical director of Women’s and Children’s Services at SMCS. “The Children’s Center at Sutter Medical Center, Sacramento is proud to be part of this exciting new initiative and its mission to rally more resources for programs that will improve children’s health.”

Troubling statistics demonstrate the need for more resources on children’s health. Since the 1980s, the percentage of overweight and/or asthmatic children has risen steadily, and the number of accidental injuries

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## Greg's Corner

Very often we as pediatricians are called upon by various "customers" to explain the differences between caring for children and adults. Whether it is to hospital administrators, planners, community leaders, payers, other colleagues or public-policy makers, it becomes very important for us to make this distinction in a convincing manner.



This is particularly important in these days of shrinking resources and money for children's health care and of an increasing push for transparency of how and why we are providing the care that we are. In this issue, I would like to review what most experts now see as the major differences in caring for children vs. adults. These issues have been cleverly referred to as: "The Four D's Plus One."

First is **Developmental Status and Change**. Simply put, when we care for a child we are not just caring for one child but a continuum of changes in physical, cognitive and emotional development that comes with growth. As an example, children and adults are often lumped together in clinical initiatives such as asthma care when in reality it is very clear that the pharmacology and

methods of drug delivery are really quite different in these populations. There are even significant differences in treatment between children younger vs. older than 4 years of age.

Next is **Differential Epidemiology**. Children have fewer chronic illnesses than adults, making it more challenging to measure performance in treatment regimes in children.

Then there's **Dependence**. Children are dependent upon adults for access to care, consistency (compliance to treatment) and continuity (children are more likely to receive their health care in multiple care sites that require coordination).

Next is **Demographic Patterns**. Children are the most culturally and ethnically diverse members of our society and in no subpopulation are there greater discrepancies in care and clinical outcomes based upon these factors than in children.

And finally, there are **Children with Special Health Care Needs (CSHCNs)**. Fortunately, more and more of our children with chronic health care needs are surviving and transitioning into adulthood. Unfortunately, we currently do not have good long-term plans and resources set aside to make this happen.

All five of these factors are co-related and account for most of the challenges that we now face in California in caring for an ever-growing base of children, and they all must be taken into consideration when planning children's health care.

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has grown as well. Meanwhile, funding for children's hospitals is declining. The goal of Together for Kids is to bolster fundraising efforts for this crisis and specifically focus on the two issues at the forefront of this threat to children's health: obesity and accidental injuries.

"Together for Kids will provide a desperately needed shot in the arm to help support the critical work of children's hospitals that care for ill or injured children and provide preventative measures to help create life-long healthy habits," said Katherine Keeney, executive director of Sutter Medical Center Foundation.

Together for Kids consists of 34 children's hospitals and hospital systems, representing 53 individual facilities serving children in 47 U.S. cities. As a tax-exempt 501(c)(3) public charity, Together for Kids will raise funds through corporate sponsorship, events, grants and other

forms of philanthropy, distributing the funds to member hospitals to address the most urgent children's health needs in their communities.

In April 2008, the Children's Center at SMCS and other member hospitals will participate in Together for Kids' first annual national fundraising campaign, "Come Out to Play!" — a month-long series of events around the country to raise funds for hospitalized children and to encourage kids and families to take part in active play that's healthy and safe.

The announcement was made on the morning of Sept. 26 at the Boys & Girls Clubs of Greater Sacramento's Teichert Branch in the Fruitridge area of Sacramento. Boys & Girls Clubs are a national partner of Together for Kids.

For more information on Together for Kids, visit their Web site at [www.togetherforkids.org](http://www.togetherforkids.org).



**Children's Center**  
*at Sutter Medical Center, Sacramento*

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