## **STOP** Overuse Injuries

Michael F Shepard MD www.michaelshepardmd.com

There is a growing epidemic involving our children today – overuse injuries. 30 million children participate in youth sports nationwide. Across the country, this results in 7 million sports injuries per year and 500,000 doctor visits. In California alone, 750,000 teens participate in CIF supervised sports. Wide participation, year round sports, and early specialization have led to an epidemic of overuse injuries. Often the child at greatest risk is the overhead sports athlete in baseball, softball, swimming, and volleyball. This is particularly true in sunny states like California where these sports are performed year round.

As a Sports Medicine Orthopaedic Surgeon, it is my job to help patients return to health and return to their sport of choice. However, surgery should always be a last resort. This is especially true in children. I care for the athletes at UC Irvine, Chapman University, Santa Ana College, Servite High School, and Villa Park High School. I also serve on the CIF State Medical Board. Our primary goal at all of these institutions is to keep the athletes healthy and out of the operating room.

Sports injuries occur in two basic patterns. In acute injuries, the athlete moves or twists or is hit and feels a "pop." This type of injury results in a torn anterior cruciate ligament, a dislocated shoulder, or a broken bone. Acute injuries are usually easy for parents to diagnose. In overuse injuries the onset is more insidious with a gradual increase in pain. These injuries tend to worsen with increased activity and improve with rest. Many times the child athletes' pain is shrugged off by physicians, coaches, and parents as "growing pains." However, if these pains are ignored they can become a much worse problem – stress fractures, cartilage injuries, ligament tears.

The first step in prevention is listening and observing your child. Forty percent of Little league players (12 years old) report elbow pain in their most recent season. The myth that many parents fall for is that "kids are more resistant to injury." This simply is not true. The child's elbow is just as apt to become injured from throwing than a major leaguer – it is a simple calculation of the strength of the child's tissues (ligaments, cartilage, bones) to the forces applied by throwing a baseball, hitting a volleyball, or swimming 5000 yards. Kids are not used to being injured and can be unsure how to verbalize this. It is very common for me to see an athlete for elbow pain when the real problem is related to stiffness in the shoulder. A thorough exam is essential to establishing the problem. Don't assume that your child will be "OK with rest."

Another misconception is that you can train kids just as you would an adult. Each child is unique and growing at varying rates. They often lack the CORE strength and conditioning of adults. Kids' immature bones and pliable growth plates have different physiologic requirements than adults. Biomechanic studies have shown that a 4 foot tall, 10 year old throws differently than a 5 foot, 14 year old who throws differently than a 6

foot 5 inch, 24 year old. This idea applies to all sports – swimming, softball, volleyball, running, etc. A child does not perform or respond like an adult, we need coaches and parents who understand this and can adapt to each child's requirements.

Finally, every child needs rest to prevent overuse injuries. Our bodies are amazing dynamics systems – activity causes breakdown and rest allows for healing. When activity (breakdown) exceeds rest (healing) the tissues fail (tear) and overuse injuries occur. Not surprisingly, it is the best players who often are courted for year round teams, all star tours, and overlapping seasons. Because of this, it is the best players who are most likely to become seriously injured. Even professional baseball players take 3 months off of throwing a year. Shouldn't your 12 year old? Three months of rest from a specific sport is recommended by the American Orthopaedic Society for Sports Medicine, the National Athletic Trainers' Association, the American Academy of Pediatrics, and Safe Kids USA.

In conclusion, we want to prevent these injuries to insure that our children can continue to participate and prevent the long term results of injury.

www.stopsprtsinjuries.org is a website that can give parents specific information about overuse injuries in 20 common sports. We all want our children to go on to become healthy adults. Listen to and observe your children for the signs of pain and injury. Provide adequate rest time to your child's athletic schedule – 3 months a year from a specific sport. Finally, although we may hope our coaches carry the very best interests for our children, it is the responsibility of each parent to care for and protect their child from injures.

## BIO

Dr Shepard is a board certified Orthopaedic Surgeon. He graduated Summa Cum Laude from UC Davis with a degree in Biochemistry. At UC Davis, he was a two time football Academic All American and won a post graduate scholarship from the National Football Foundation. He graduated from UCLA with AOA honors and was recipient of the McGraw Hill Scholarship given to the top student in the basic science years. He completed his residency at UCLA and completed his sports medicine fellowship at the American Sports Medicine Institute with world famous James R Andrews and William Clancy. Dr Shepard's practice is at the Orthopaedic Specialty Institute in Orange where he cares for professional and recreational athletes alike. Dr Shepard and his wife Colleen have four girls – Molly (5), Katie (5), Erin (5), and Delaney (3).