Young athletes feel more pain, no gain with non-stop training

Clint Williams – Staff, Atlanta Journal-Constitution Sunday, October 27, 2002

After 2 ½ hours of infield practice, Brock Yates' right shoulder hurt. He didn't think much about it.

"All of our arms hurt after that," Brock said of his teammates on the East Cobb Astros, a group of elite 13-year-old baseball players who won a national championship this summer.

But eh shoulder didn't stop hurting, and soon Brock couldn't raise his arm above his head.

"He was almost to the point of tears," said Kim Yates, the boy's mother. "It pains you. You don't want to see your kid hurting like that."

But millions of kids --- as many as 8 million every year --- are hurting like Brock. Striving for athletic excellence, they're pulling up lame because they're pushing too hard. Throwing too many balls, running too many miles, swimming too many laps.

It's relatively new phenomenon, sort of a repetitive stress syndrome for the young athlete. Today's young athletes, the ones who want to be stars, are often focusing on one sport year round. And kids are getting hurt because of adult-sized training routines.

In an article titles "The Dark Side of Kids' Sports," the journal The Physician and Sports Medicine reported last fall that "overuse injuries have replaced traumatic injuries as the most common reason for physician visits."

And it might be all for nothing.

The drive to have children specialize in a sport at earlier ages is pointless, experts say. You might as well go back to playing baseball in the spring, football in the fall, then basketball in the winter.

Jim Brown, editor of the Georgia Tech Sports Medicine and Performance Newsletter, documented this in a book published last year.

"Does a child have to be a star at 8 to be a start at 18? No," Brown writes in "Sports Talent: How to Identify and Develop Outstanding Athletes."

"Does a child have to be involved in competition at 8 to be outstanding at 18? Earlier is not necessarily better in terms of sports-specific training....There is plenty of evidence to

show that the real athletes kick in at age 13 or 14."

Dr. Paul Stricker, an associate professor at Children's Hospital of San Diego and physician for the U.S> Olympic team at the 2000 Games in Sydney, Australia, agrees.

Performance in athletics is limited by development of the brain, he said. The part of the brain that tracks moving objects such as baseballs doesn't develop until about age 7.

"You can take a 5-year-old and throw 10 pitches or a hundred pitches and he isn't going to get much better at hitting." Stricker said.

Young joints vulnerable.

Practice has become more dangerous than competition. More than half the children treated for sports-releated injuries each year, doctors, have injuries caused by overuse.

"We're seeing more overuse injuries in kids and the kids getting those injuries are younger and younger," said Dr. David Marshall, medical director of the sports medicine program at Children's Heathcare of Atlanta.

"Of the 15 kids I saw today," Marshall said Wednesday, "nine of 10 of them were for overuse injuries."

Children's Healthcare has seen enough of this to put out a pamphlet on overuse of kids' muscles and joints.

Overuse injuries "are on the increase at an alarming rate," said Dr. James Andrews, the noted orthopedic surgeon in Birmingham who repaired the elbow of Atlanta Braves pitcher John Smoltz and works on many of the South's top professional and college athletes.

Young joints, where tendons, ligaments and bone growth plates converge, are particularly susceptible to overuse injuries. Most of the young patients Marshall sees have hurting knees, elbows, shoulders, wrists or heels.

In rare cases, Marshall said, overuse injuries can lead to premature arthritis in the elbows or knees. But these injuries often take months to heal, ending the season for a player. And while the injuries likely won't have lasting physical effects, they often drive a youth out of sports.

Stress fractures of bones in the feet and lower leg are less common overuse injuries, but "your kids absolutely shouldn't be getting stress fractures," said Stricker, the Olympic team physician. He said that during his 10-year practice, the number of overuse injuries he treats have jumped 25 percent.

"And the patients are getting younger, so it's sort of a double whammy," Stricker said.

Stricker, Marshall, Andrews and other physicians attribute the rise in overuse injuries to the adult takeover of kids' games.

Harder to make team

Parents have always tried to live out their own childhood dreams by pushing their kids to play sports, said Steven Danish, a sports psychologist and director of the Life Skills Center at Virginia Commonwealth University. But with the rise of the sport star as a millionaire idol, Danish said, many parents have goals beyond glory.

"All these parents think their children are going to get college scholarships," he said. "There are more and more parents telling their kids, 'You're good and if you work hard you might get a college scholarship.""

And to get a college scholarship, you must first play on the high school team, which, around metro Atlanta, is getting tougher and tougher.

For instance, at a traditional baseball powerhouse such as Lassiter High School in east Cobb County, more than 100 players try out for 25 sots. It's the same in other metro Atlanta schools too, such as soccer powerhouses McIntosh in Fayette County or Parkview n Gwinnett County.

Rick Wolff, director of the Center fro Sports parenting, based at the University of Rhode Island, offers and additional reason parents today are so much more involved in the athletic career of their children. At a time when both parents work, you sports provide a way to schedule that magical "quality time."

Parents want what they think is best for their children, Wolff said, "so they think, 'If my kid plays 60 games a year, that's better than 30."

Thus, more and more metro Atlanta kids are playing more and more games. The Georgia Baseball Association, a loose league of travel baseball teams, has grown from 170 teams three years ago to more than 300. The Northwest Georgia Baseball Association, made up of travel ball teams primarily from Cobb, Cherokee and north Fulton counties, has gone from 60 teams to 160 in three years.

Sore knees, cold peas

Youths who play travel ball, more intense and more competitive than the recreational ball most children play, typically have 70 to 90 games a year. Of the 75,000 players registered with Georgia State Soccer Association, 15,000 are select players who have 30 or more games over the course of the spring and fall seasons.

As a result, said Marshall, "The kids aren't controlling the duration and intensity of the workouts."

In baseball, for example, while most youth leagues regulate the number of innings a player can pitch in a week, there aren't limits on the number of pitches. Travel baseball rules don't set limits on a pitcher's workload except during tournaments. And many pitchers work out during the week with professional instructors. It all adds to stress on the joints.

"The elbow doesn't care if you're pitching in a game or not," Marshall said.

Baseball player Brock Yates, an eighth-grader at Simpson Middle School in Cobb County, practiced two to three hours a night for four days a week.

His team played four or more games a week --- more than 100 over the course of a season that started in February.

Warned by other parents to keep a careful count of how many pitches Brock threw, his mother accepted the long season as unavoidable.

"Brock, like other kids, likes to play with kids as good as they are," said Kim Yates. "And to do that, you're doing to play 100 games a year."

Fifteen-year-old Melissa Crane's routine was even more grueling. A ballet dancer since age 4, Melissa last year was taking classes or rehearsing two to three hours a night for five nights a week. Then, she spent seven hours in the studio every Saturday.

Every evening, she would sit with bags of frozen peas on her knees to slow the throbbing. She took ibuprofen to ease the swelling of tendon of her knees.

"I would basically cover my entire body with Tiger Balm," said the Walton High School sophomore, referring to a brand of strong analgesic cream.

Assured by Marshall, her doctor, that the pain didn't signal permanent damage, Melissa's parent let her keep dancing, preparing for a role in the holiday presentation of "The Nutcracker" at the Cobb Civic Center.

"I didn't have a whip on me," Melissa said. "I just felt like I didn't want to let anyone down."

She stopped ballet this past spring and the pain is gone. She is thinking of trying out for the golf team next spring.

Adolescents like Melissa and Brock are particularly susceptible to overuse injuries. Rapid growth comes at a time when workloads and expectations increase.

"Kids in the middle of growth spurt are tight," said Marshall, explaining that taut tendons and ligaments are more vulnerable to injury.

Growth plates at the end of major bones in the arms and legs are also vulnerable to injury. Brock, for example, was sideline with what is called "Little League shoulder." Marshall said.

Repeated stress --- throwing a base ball --- causes widening of the growth plate at the top of the humerus, the arm bone between the shoulder and elbow.

"It hurts like the dickens," Marshall said. "We treat it like a fracture. Absolutely no throwing --- none. No pitching, no throwing in then back year, no pebbles in the pond. Lock the glove in the trunk.

Dr. John Fiori, an associate professor of sports medicine at UCLA, says that "it's difficult for a parent or coach to know when a child is growing through a growth spurt, but a young athlete should be observed carefully for signs of overuse, even if they're not training any harder than usual.

Fiori said overuse injuries could be prevented if everyone remembered one thing: "Children and adolescents are not little adults."

Fewer kids would suffer overuse injuries if adults backed off a bit, said Marshall.

"Let the kids make up their own rules," he said. "Let them determine when to stop."