## - NOT JUST PART OF THE GAME What parents of young athletes should know

"Getting your bell rung ..." is an expression used by athletes to describe what happens when a player takes a hard hit to the head and sustains a concussion. Many young athletes view a concussion as simply "part of the game."

But that attitude needs to change, according to Robert S. Crawford, M.D., a board-certified family medicine physician in Cuyahoga Falls and team physician for the Akron Aeros, Kent State University and Wadsworth High School.

A concussion is a complex process affecting the brain. It is induced by traumatic biochemical forces and can be caused by a direct blow to the head, face or neck, or a blow elsewhere on the body, which transmits force to the head.

As a result, brain tissue is violently shaken within the skull, which can damage both brain cells and the blood vessels that feed them. The injury also triggers a cascade of biochemical reactions, flooding the brain with calcium and potassium ions that cause blood vessels to constrict. This hampers the metabolism of glucose, which is the fuel the brain uses for energy.

Most concussions will resolve on their own in 7 to 10 days, but others may take 30 days or more for symptoms to subside. "Each individual is different," Dr. Crawford says.

He recommends complete physical and mental rest to reduce the metabolic demands placed on the brain while it is healing.

"If you could put injured athletes in a semi-darkened room and have them sit there for three days and do absolutely nothing  no TV, texting, video games, attending school or doing homework – that would be the best early treatment for concussion,"
Dr. Crawford says.

How does a physician know when it is safe for an athlete to return to action? Most area schools subscribe to a five-day, return-to-play protocol. Athletes must be completely symptomfree before they can even start the protocol. "It's a



Dr. Robert Crawford: It's important for parents to discuss concussions with their child athletes.

graduated return to play. First, the athlete will just run around the track – with no practice. Or ride a stationary bike. If any symptom returns at any time during the five days, he/she will have to restart the protocol," Dr. Crawford points out.

The sports medicine specialists of the Summa Center for Sports Health are experienced in concussion management. To make an appointment for your child at one of our six locations in Summit, Medina and Portage counties, call at (888) 778-6627.



## Having "the talk" with your child athlete

It's important for parents to have "the concussion discussion" with their child. Talk to your athlete about the dangers of ignoring a possible concussion. Make it clear that:

- Playing with a concussion is dangerous it is not a sign of courage or toughness.
- Concealing symptoms increases the risk of a lifethreatening brain injury.
- Physician instructions and return-to-play guidelines exist to protect – not hamper – the athlete. The recommendations should be followed.
- It's important to avoid sustaining a second concussion before the first injury has healed. Cases of second injury syndrome (SIS) are rare but can occur in children and young adults after even minor impacts. In SIS, due to the reduced blood flow caused by the first concussion, a seemingly minor second impact can be catastrophic, causing blood flow regulation in the brain to go haywire, which can result in serious brain damage or even death.

## Pre-testing for young athletes

Robert S. Crawford, M.D., recommends preseason cognitive testing for young athletes because it helps physicians decide when - or if - it is safe for youngsters to return to play after a concussion. Preseason testing provides a baseline for comparison purposes should a child be injured.

Some schools offer testing as a standard part of the school's athletic program. If your child's school does not, the Summa Center for Sports Health can administer the test. To make an appointment, call (888) 778-6627.

