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Spinal Stenosis: The Devastating Spine Condition Coaches Sometimes Miss

Dr. Ray Bosita Texas Back Institute

Athletes who compete on the college-level are some of the strongest and best conditioned in the world. In the case of college football players, by the time he is charging out of the tunnel for his first collegiate kickoff, he has likely played the game for more than 10 years – from Pop Warner through high school – and has learned many techniques for avoiding injuries.

Given this physical strength, conditioning and training, one can imagine the complete shock and devastation Roderick Johnson, starting offensive tackle for the Florida Gators, must have felt when he learned the routine "stinger" he felt in his shoulders and arms was, in fact, much more serious. Johnson's collegiate and possible NFL career came to an end this spring when he was diagnosed with congenital spinal stenosis.

Sadly, the spine specialists at Texas Back Institute have seen this condition all too often among athletes who compete in contact sports. Spine surgeon, Dr. Rey Bosita, explains this very serious condition.

"Spinal Stenosis is any condition that causes narrowing in the spinal canal, Dr. Bosita notes. "When a patient has spinal stenosis, there is not enough room for the spinal cord within the spinal canal. Some people are born with it, others can develop this from injuries and some can have disc herniations or arthritis that cause this condition."

"Specifically for athletes, spinal stenosis in the cervical spine can be a big problem," he said. "Often times, people will have stingers, with transient pain in one or both of their arms. Some patients can even have transient quadriplegia,

where their whole body stops working and then has to wake itself up after a while. And those patients are high risk for further injury and even becoming paralyzed," he said.



Sometimes there are No Symptoms

This condition is made even more difficult to predict because sometimes the patient has no symptoms. Dr. Bosita explains.

"This is why this is such a difficult condition to treat," he said. "Other times, someone can sustain a trauma from getting hit in a football, soccer or hockey game and they will start getting neck pains and 'stingers' where one or both of the arms get numb or have a lot of tingling in them"

In the case or Roderick Johnson,

this condition had never shown itself in all of the pre-season physicals he had undergone and all of the games in which he had competed since he was a young boy. He had never had even a hint of the problem. According to the college sports magazine, SB Nation,

"Johnson did not report or show signs of any previous episodes of the condition prior to suffering a "stinger" on April 3 during a scrimmage. Johnson experienced numbness in his fingers and hands and did not participate in the final week of spring camp or Saturday's Orange & Blue Debut."

How can sometime so serious go undetected for so long? Dr. Bosita explains.

"Spinal stenosis in the cervical spine can go undetected because people don't feel symptoms," he said. "When players are hitting in grade school and high school, it's not with the same velocity and aggressiveness as in the college and pros. So, the same hit delivered in grade school and high school will not cause enough force at the time of impact to cause any symptoms. As the collisions get more violent and athletes get bigger, the trauma to the spine is such that the patient will feel symptoms," he concluded.

Some Continue to Play

"I have treated several athletes with spinal stenosis," Dr. Bosita noted. "It's a difficult discussion to have with the patient and with their parents because they have to give up football or other contact sports."

"For the patients who enjoy other sports or activities, they are encouraged to do these things, rather than contact sports. However, if football is a big part of their life, some of them will continue to play. At this point, it is very important for us as spine surgeons to make sure they are aware of the risks of what can happen if they continue to play,"

"The most catastrophic risk is the patient becoming paralyzed," he said. "A lot of time the collisions in football are unpredictable and a player can get hit when they are in a vulnerable position. At that time an injury can occur which can potentially be devastating."

"Unfortunately, there are no screening procedures for spinal stenosis," he said. "It's only when the patient begins developing 'stingers,' neck pain or temporary paralysis that we look closer at whether this condition exists."

Treating Spinal Stenosis

When young athletes are diagnosed with spinal stenosis or arrive in the emergency room with a potential spine injury, there is a specific protocol which is followed. Dr. Bosita explains.

"There are two phases of treatment," Dr. Bosita notes. "In the acute phase, a patient has stingers or transient quadriplegia. The first thing we check is to make sure is there is no disc herniation, there is no cervical spine fracture and there is no instability."

"At the time the injury occurs, the patient is kept with very, very careful spine precautions. The patient is logrolled and the helmet and shoulder pads remain on until they get to the hospital and only in a controlled environment in the care of a spine surgeon or ER doctor. A trauma surgeon will start to take off the helmet and the shoulder pads. Then, once a physical examination is done, an initial x-ray, CT scan and even an MRI are completed. At that point, we will start to figure out what caused this problem," he said.

"If it's a fracture, the player will sometimes need surgery. If it's a disc herniation, they will also sometimes need acute surgery. However, if it falls into the category of a transient spinal cord injury with congenital spinal stenosis, we watch those patients very carefully and rehab them."

The second phase of treatment is



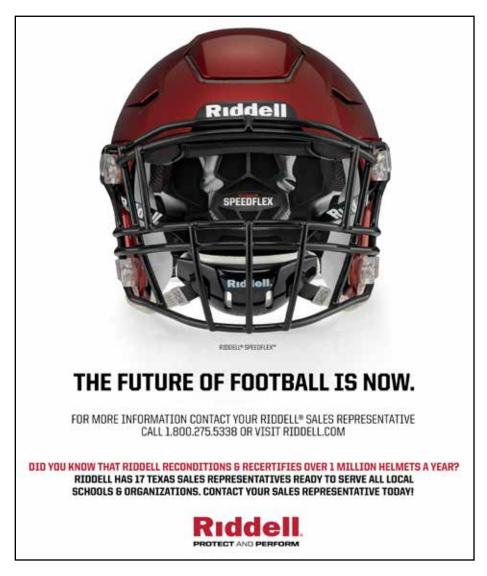
the chronic phase. This is actually more difficult from a personal standpoint because a lot of these kids still want to play," Dr. Bosita said. "It's very hard to tell the kids you shouldn't play and you have to give up something you enjoy because you could potentially become paralyzed if you continue."

"As for the player from Florida and other people from other colleges, you hear about stories like this a couple times a year where really high performing athletes will give up a career because of either a spinal stenosis like this or head injuries. Unfortunately, it's more common than we want it to be but hopefully with changes to the safety equipment and the rules, we

can try to reduce the incidents of these problems."

For more information on Texas Back Institute, visit the clinic's website www.texasback.com.

Spinal stenosis is a very serious condition and should be treated immediately by a spine specialist.



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