Kevin Ware's Broken Leg Possibly Caused by Undetected Stress Fractures

By LIZ NEPORENT

Louisville Player Shatters Leg During Elite 8 Game
Louisville basketball player Kevin Ware's horrific leg fracture was a freak accident that may have been exacerbated by previously undetected stress fractures.

"He came down hard, landing in an awkward way," said Dr. Robert Glatter, an emergency physician at Lenox Hill Hospital in New York and a former sideline physician for the New York Jets football team. "That combined with an underlying bone issue or an existing stress fracture predisposes someone to this type of injury."

Tim Hewett, director of sports medicine research at Ohio State University agreed. He speculated that Ware's diet could have been deficient in vitamin D and calcium leading to more porous bones. That, combined with the constant pounding Ware endured through an entire season of basketball, may have created small stress fractures in the tibia and fibula bones in his lower leg, causing his bone to snap when he took a bad step.

"Watching the video tape over and over, I would not expect this type of fracture to occur. I suspect he had some risk factors that created some sort of bone deficit," he said.

Glatter said an open fracture where the bone protrudes through the skin are exceedingly rare in sports.

"They're more commonly seen in car accidents where the shin smashes against the lower part of the dashboard or when someone jumps from a height like in parachuting," he said.

Hewett said that even in football, where athletes are more likely to hit at a high velocity with great force, open fractures aren't a common injury.

"You almost never see it in basketball, but you do see one or two a season in football," he said.

Former Washington Redskins quarterback Joe Theisman famously sustained a broken leg on "Monday Night Football" in a game against the New York Giants in 1985 when he was tackled by Lawrence Taylor. In 2006, Michael Bush, a star running back for the Louisville Cardinals, snapped his tibia in two during a routine play and was forced to sit out two full seasons as a pro while it healed.

Ware, 20, underwent successful surgery at Methodist Hospital in Indianapolis Sunday night to repair the open fracture of his right tibia that he sustained during Sunday's NCAA Midwest Regional final.

In an operation that lasted about two hours, his bone was reset and a rod was inserted into his leg to stabilize the injury as it heals. The puncture wound caused by the bone ripping through the skin in his lower leg was also closed.

Ware's injury is known as an open fracture because the fracture site was exposed to outside air. The injury was classified as a "compound" fracture, the most dramatic type of open fracture, because the bone broke through the shin and was plainly exposed as he lay on the court.

Compound fractures are a particularly dangerous injury, Glatter warned.
"Any time you expose bone to debris, dirt and bacteria, the chance of infection is exceedingly high," he said.

An infection in the bone can lead to potential issues with bone healing. The wound must be cleaned and antibiotics administered as soon as possible after the injury has occurred, Glatter said, but even then chance of infection can remain high during the healing process.

The rod will remain in his leg as long as six months, depending on how quickly the bone heals. Nerve damage, loss of motor control and loss of function in the lower leg and foot are also possible complications according to both Glatter and Hewett.

However, Glatter said that if Ware is generally healthy with no serious underlying medical conditions he could be back on the court within a year – maybe even as soon as three to six months if his recovery process goes smoothly.

"This is a devastating injury but it doesn't have to end his career," Glatter said.