SCRIPT-PRINT New Methods for Treating Sports Injuries Require Closer Look

Auburn (Alabama) University wide receiver Will Hastings tore his anterior cruciate ligament in March. Six weeks later, he was jogging, and four and a half months later, he was running plays at full speed in practice. It shocked both him and his parents but the university claims his doctor used regenerative medicine instead of reconstructive surgery and that made the difference.

Specifically, the university credited his doctor's use of a combination of platelet-rich plasma and stem cells which it says exponentially sped up the athlete's recovery.

Can an athlete, or anyone for that matter, be helped with a similar approach known as regenerative medicine? The National Institutes of Health defines regenerative medicine as "the process of creating living, functional tissues to repair or replace tissue or organ function lost due to age, disease, damage, or congenital defects."

OSF HealthCare Orthopedic Surgeon Dr. Peter Mulhern, who also serves as the doctor for the Monmouth College football team, says the jury is out on whether regenerative medicine really works. "At least up until this point, we don't have good research to back that up. But, that's a claim that was made in a perfectly healthy, young person who almost would be expected to recover like that without having the other stuff involved," he said.

Regenerative medicine can be divided into three areas:

Stem cell therapy facilitates healing by injecting or placing live cells into the patient.
Tissue engineering replaces or repairs damaged tissue with natural tissue, man-made tissue or both. (Think skin grafts for burn patients).
Prolotherapy including injecting an irritant into the injured area, which temporarily increases inflammation. The hope is that the additional inflammation will increase blood flow and cause cells to regenerate.

Dr. Mulhern says there have only been small studies with inconclusive results.

"So until we have better studies, the jury is still out and I think, like we talked about before, that's why the insurance companies are balking at covering that kind of treatment because they don't have the evidence that it's really that beneficial as opposed to not paying for that extra treatment," he concluded.

According to Mulhern, some people are willing to try the unconventional approaches because there isn't significant risk.

"'If it makes me better, I'm all for it,' so I think there is a lot of that mentality. You know, 'Why not try it if it works for somebody. If it works just for me, I don't care if it works other people' you know. I think that's where that comes from but I don't know that I would necessarily recommend that for someone trying to recover from their injury," said Mulhern who completed a residency in orthopedic surgery at George Washington University in Washington D.C.

Dr. Mulhern is affiliated with the OSF HealthCare Galesburg Clinic, OSF HealthCare Holy Family Medical Center in Monmouth, OSF Medical Group, OSF Healthcare St. Mary Medical Center in

Galesburg. He is also a member of the American Board of Orthopedic Surgery, an organization that creates standards for the education of orthopedic surgeons.