

## Improving the sports concussion ‘tool kit’: Virtual reality goggles promise speedier diagnosis

As the 2018 [football] season gets into full swing, some college teams are keeping a new gadget on the sidelines: a pair of virtual reality goggles designed to diagnose concussions. The Pac-12 conference will actually use the VR goggles in every sport.

...

The Eye-Sync goggles, made by Palo Alto, California-based company SyncThink, work by displaying a dot traveling in a rough circle and tracking the user’s eyes as they follow the movement of the dot. While the goggles track eye motion, the device is really measuring the brain’s ability to predict the dot’s movement, says SyncThink founder Jamshid Ghajar.

...

“What we need is a toolkit—eye tracking could be one of the tools,” Ghajar says.

A variety of other diagnostic techniques are also being developed to fill that toolkit. In the spring, researchers announced that certain [biomarkers in plasma](#) could accurately predict whether college athletes had sustained a concussion. Other research suggests that [measuring changes in the speed of blood flow to the brain](#) might identify concussions. A [spit test](#) that measures genetic material in saliva has shown promise identifying concussions in young patients suffering from long-term symptoms.

...

Determining whether someone just had their “bell rung,” or if their brain slammed into the side of their skull with enough force to temporarily inhibit cognition, is a tricky science.

**Read full, original post:** [How Virtual Reality and Sideline Brain Scans Could Help Diagnose Concussions](#)