CELTICS

Inside the stem cell therapy the Celtics' Kemba Walker used to help his ailing knee

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The Celtics have said that Walker also had begun a strengthening program and would be sidelined until at least January. MARK J. TERRILL/ASSOCIATED PRESS

The Celtics have spent nearly a year trying to effectively treat point guard Kemba Walker's left knee pain. They tried rest. They tried having the knee drained. They tried strengthening it.

When Walker returned from brief breaks, such as three- and six-game absences last winter, or longer respites, like the one created by the NBA's four-month hiatus due to COVID-19 last spring, he usually said he felt better and ready. But the good feelings turned out to be temporary, and the pain either lingered or resurfaced.

In early October, soon after Boston's season ended with a conference finals loss to the Heat, the Celtics tried something different. <u>Walker received a stem cell injection in</u> <u>his left knee</u>. The team later announced that Walker had begun a strengthening program and would be sidelined until at least January.

Earlier this month, Walker was asked about the stem cell procedure. He was asked how it all worked.

"I don't know," he said. "You've got to ask the doctors. It's supposed to help me, I know that. It's supposed to help me. A lot of good stuff for the knee. I just went into it. I trust the doctors. I trust the people that's helping me. It was the best way to go. It's definitely calmed my knee down a lot, to tell you the truth. I'm feeling really good right now."

Stem cell injections have become increasingly popular among professional athletes looking for ways to treat ailments without surgeries and the long, grueling recovery processes that follow. Tiger Woods, Kobe Bryant, and Peyton Manning are just a few of the big names who have undergone these treatments.



Like Kemba Walker, Tiger Woods has had stem cell therapy to treat injury. (AP Photo/Phelan M. Ebenhack) PHELAN M. EBENHACK/ASSOCIATED PRESS

Stem cells have the ability to turn into other cells, and they are used in the medical field to create new, healthy tissue where there has been trauma or degeneration.

The US Food and Drug Administration bans the manipulation of stem cells, and only allows the use of one's own stem cells in procedures. Blood, fat, and bone marrow containing stem cells are withdrawn from a healthy part of body before undergoing a "spinning" process in which the stem cells are separated before being injected into damaged areas.

But the efficacy of the treatments remains up for debate. Health insurance providers do not cover the injections as there is no concrete evidence that they truly help, and

most hospitals decline to conduct the procedures at all, both because of uncertainty about the results, and ethical issues.

A spokesperson at one Boston-area hospital said its doctors would not comment on stem cell procedures. A sports medicine doctor at another Boston-area hospital declined to speak publicly on the issue due to the controversy surrounding the procedures, and the concern about pushback from the private medical sector that has profited from stem cell treatments.

"The reason insurance doesn't cover it is there's no evidence that it works, so it leads to this unregulated wild west," the doctor said. "There are researchers who are doing high-level research on it, which is great. Those are the ones that are going to hopefully be able to help us use these in an effective way in the future, but we're not really there yet."

Nevertheless, the procedures remain quite popular, and there are proponents. **Dr**. Janet Pearl, medical director of the Boston Stem Cell Center, said the treatments are an effective way to reduce pain and inflammation and restore normal function in a joint that has degenerated, such as the knee.

"Physicians who do these injections are basically facilitating the body's actual own healing properties," Pearl said.

Pearl said studies have shown that stem cell therapy can be as effective as a total knee replacement for treatment of arthritis. She said that in general her patients typically see improvement about two months after undergoing the procedure, and that most of the relief has been achieved within 3-4 months, with gradual improvements continuing over the course of one year. She does not think the insurance companies' reluctance to cover the procedures is an indictment of their efficacy.

"It's still relatively new," she said. "There's a lot of data, but because there's a variability in how these procedures are done and the studies tend to be small, and it's expensive, insurance isn't covering it. Insurance is looking for larger, randomized, controlled trials, larger samples, more consistently done... There's a lot of discussions about how to move this forward."

The impact of Walker's stem cell treatment may never be clear. Maybe it will be helpful, maybe it will simply be a placebo as he improves due to the rigorous kneestrengthening program he is completing, or maybe he will continue to deal with knee issues.

"The way I felt the last couple of months, if I don't feel that way, then I'm better, to tell you the truth," Walker said Dec. 1. "Because, to be honest, it wasn't good. I wasn't myself, didn't feel good. It's really just about being comfortable, 100 percent comfortable when I'm making my moves. Not having any thoughts and thinking that it's going to be pain when I land and things of that nature. So I think that will be the signs of me feeling good again."

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