

Are stem cells the “holy grail” for relieving back pain? Texas Back Institute doctors lead a national trial to find out

Written by Art Young | October 24, 2017 | [Print](#) | [Email](#)

A research team from Texas Back Institute will be working on a Federal Drug Administration (FDA) trial to investigate one of the most revolutionary medical treatments in history – the use of stem cells to rejuvenate spinal tissue.

The clinic has been involved in numerous important trials including those for artificial disc replacement and scoliosis treatment. What makes this trial different is that it is occurring at a time when the federal agency is cracking down on clinics around the country that purport to offer stem cell treatments.

As [Dr. Scott Blumenthal](#), who is a spine surgeon at [Texas Back Institute](#) and the Center for Disc Replacement and the lead researcher on this stem cell trial, noted, “We are excited to be a part of the process of evaluating the efficacy of stem cells for tissue rejuvenation on behalf of the FDA. It’s a work in-progress. All of those clinics that are offering some form of ‘stem cell therapy’ are using questionable and potentially dangerous medical practices.”

In order to understand the magnitude of this trial and the danger of unauthorized stem cell therapy, Dr. Blumenthal offered a primer on this subject.

What is Stem Cell Therapy?

“Stem cell therapy is a subset of what is being called ‘regenerative medicine,’” Dr. Blumenthal said. “This involves utilizing the body’s own power to regenerate itself. This is much like when we were in utero and the tissue and organs of the body were being formed.

“Those cells, which are called stem cells, are still in the body and they can be activated and perhaps augmented from external sources.

“While stem cell therapy can be used to treat many conditions, at the Center for Disc Replacement and Texas Back Institute we are concerned with how they might impact conditions associated with the spine. Our primary focus is to determine the potential for these stem cells to regenerate or regrow spine or disc tissue.

“The disc, which is the ‘cushion’ between the vertebra tends to deteriorate as we age. If we can slow down that process or even reverse it, we will have accomplished what may be the ‘holy grail’ of correcting lower back and neck pain.”

Dr. Blumenthal is leading the research effort to determine the capacity of stem cells for spinal conditions.

“We are currently involved in the trial of an FDA–sanctioned (but not yet approved) process to determine if stem cells from an outside source can be injected into a patient’s disc and allow it to regrow and decrease pain.”

Stem Cell Therapy is Controversial

As with any new medical therapy, going back thousands of years to the discovery of the benefits of aspirin, there is concern on the part of physicians and regulatory agencies, such as the FDA, about the benefits versus the risks of stem cell therapy. This concern has been exacerbated by recent events.

“You may have heard that the FDA shut down two ‘stem cell clinics,’” Dr. Blumenthal said. “There is a specific, FDA-approved way that stem cells can be used in the United States at the current time, and these two clinics were not following the approved guidelines.

“As a consumer who is contemplating getting stem cell therapy, it is important to ask these questions: ‘Am I a part of an FDA study?’ ‘Is this truly a stem cell?’ If this so-called stem cell treatment is not sanctioned by the FDA, this is illegal. If there is a claim that stem cells are being used and the substance is not stem cells, that’s false marketing and in the medical profession this is unethical.

“There are more than 500 stem cell clinics in the U.S., and these are practitioners that consumers should be very wary of. Unless they are injecting these stem cells in a very specific way or they are involved in an FDA study, ‘buyer beware.’ Insurance does not cover these unsanctioned procedures so it is a very lucrative, cash-only business for these clinic owners.

The Future of Stem Cell Therapy

Managing this FDA trial on stem cell therapy is an exciting time for Texas Back Institute and the Center for Disc Replacement and both organizations are pleased to be a part of this effort. Dr. Blumenthal is cautiously optimistic.

“In the future, we hope to be able to slow down or regenerate aging discs,” he said. “The disc is what causes a great deal of back pain because they deteriorate as we get older and there is no cushion between the bones of the spine.

“If we can intervene biologically with an injection of cells to help reduce or eliminate patient pain, we could avoid tens of thousands of surgeries. Historically, Texas Back Institute has been on the forefront of technology. We were the first clinic to do the artificial disc studies with the objective being to reduce disc pain. The next logical step is a less surgical procedure, such as an injection of stem cells. This research could lead to an off-the-shelf stem cell product, and we are pleased to be involved.”

About the Author: *Over the past 35 years, Art Young has interviewed some of the most interesting people in the world and used these conversations to develop a diverse catalog of compelling stories. He is a writer, blogger, podcaster, broadcaster and frequent speaker on subjects ranging from technology to healthcare to music to outdoor sports and too many other subjects to mention. If content is king, then Art Young must be his strongest emissary.*

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