Stem cells are a hot topic in the world of medicine. Offered in a growing number of practices, the latest versions of stem cell therapy have nothing to do with embryos, and involve no questionable new drugs. Considered to be in its infancy in the U.S., adult stem cells are being used and studied in the treatment of everything from joint and spinal injuries to neurological conditions. There are skeptics, of course, many of whom maintain something that seems too good to be true usually is.
A SUCCESS STORY

A form of stem cell treatment made its way to Nacogdoches via a local pain specialist who became curious enough to become certified and affiliated with the California Stem Cell Treatment Center. The method isn’t a cure-all, says Dr. James Davis of Interventional Pain Management, but for patients like Virginia Sims, the results can be a pleasant — if not life-changing — surprise.

Sims, a veteran of spine surgery who was unable to move her left foot at all, knew this new method wasn’t a guarantee, but decided to try it anyway.

“The thing is — none of the (mainstream) procedures were mainstream when they started,” she said. “It may or may not work for everyone. I don’t know — I only speak for me.”

In a video taken three weeks after the procedure, her progress, along with Davis’ delight, are evident. Once dependent on a walker or cane, she stood and walked on her own with ease.

Not all patients will get this dramatic a result, Davis says, though conditions like osteoarthritis appear to be what he describes as “low hanging fruit.”

“It’s truly investigational,” Davis said. “Over time, I believe we will be able to estimate the effectiveness and the problems that are best treated.”

WHAT ARE THEY, EXACTLY?

Stem cells — primitive cells that haven’t yet transformed to perform a specific function — are harvested from the patient (not as scary as it sounds, according to Davis), “made active” via a complex preparation process, then given back to the same patient within the same day.

Many factors then come into play, including the stem cells’ regenerative abilities.

“The simple answer is they become the cell you are trying to replace,” Davis said.

The method used by Davis harvests the cells from fatty tissue in what is described as “minimally invasive” liposuction.

Adipose tissue is the one area, he said, where stem cells don’t tend to drop in number as one ages.

Methods of stem cell therapy vary, and those variations include where the cells come from. Some procedures use cells taken from bone marrow or blood components.

Mark Hackbarth, a pain specialist with Tyler-based Precision Spine Care, began using a method known as PRP, or platelet rich plasma, about 10 years ago. He, too, believes stem cells offer great promise, particularly in musculoskeletal treatment.

“It’s like anything else,” he said. “You have to first make the proper diagnosis. If I do the wrong procedure, you won’t get the right results.”

Typically, the more damage to a joint such as a knee, the less regenerative effect stem cells may have, he said.

“If it’s just bone on bone, there isn’t anything to build on,” he said.

EXPECTATION VS. REALITY

“There are no guarantees. I can’t guarantee it will do a darn thing. If somebody tells you they’ll be able to get a certain result, run.”

DR. JAMES DAVIS OF INTERVENTIONAL PAIN MANAGEMENT

As with any medical procedure, candidates are screened.

Among various diagnostic criteria, this screening weeds out patients who expect nothing short of a miracle in exchange for the typical $9,000 drive-out price.