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'Unbelievable': Paralyzed man back on his feet after embryonic stem cell therapy

BY MELINDA MAWDSLEY, THE DAILY SENTINEL

Rusty Leech was trying to tighten his abdominal muscles while lifting weights at St. Mary's Life Center earlier this month, when he had "a weird sensation" near his stomach.

"I felt the waistband of my pants," Leech said.

Normally, people feeling their pants around their waist is not noteworthy.

But Rusty is a paraplegic and had not felt pants on his body for more than nine years.

The recently acquired ability to feel his waist is one in a series of physical breakthroughs Rusty has made in the months since The Daily Sentinel's December stories about him. Rusty attributes each newfound feeling to embryonic stem cell therapy.

In December, Rusty and his wife Kathy, both 50, landed in Delhi, India, with the hope that nearly \$35,000, two months of physical therapy and embryonic stem cell injections would enable Rusty to feel something below his waist again.

Two months after returning to Grand Junction, not only can Rusty feel his waist, he has regained limited muscle use to help him go to the bathroom and move his legs a little on his own.

Moving anything below his waist is exhausting, he admitted, but daily physical therapy is designed to help him rebuild the muscles that atrophied after he was paralyzed.

The Leeches plan to return to India in August for a second round of embryonic stem cell therapy, which is intended to repair and restore nerve cells damaged in Rusty's spine in an all-terrain vehicle accident nearly nine years ago.

Rusty and Kathy are still smiling about their first experience.

"The results were unbelievable, to feel the sensations in my body that weren't there before and to continue to feel sensations," said Rusty, a self-proclaimed skeptic.

'WE DIDN'T BELIEVE IT'

Two months of embryonic stem cell therapy did not cure Rusty.

He cannot stand up without support. His foot cannot hit a wall and feel it. But he can walk with braces and a walker.

He can hold a leg in the air and move it to one side. The sensations he regained are mostly deep, muscle sensations that are hard to explain, he said, because they are feelings he never had before his ATV accident.

For example, while in India, Rusty felt the weight of his bottom for the first time in a long time. He didn't feel his bottom in contact with a chair, he simply felt the weight of his bottom pulling down on his upper body.

“When you feel like you've gained a sensation in a deep muscle, it's one at a time,” Rusty said. “It's not like you feel your whole leg. You feel one muscle. A week or 10 days later, you'll feel something else.”

Rusty still uses a catheter to go to the bathroom. After his stay in India, though, Rusty can use his muscles to help him go to the bathroom. He did not have muscle control near his bladder before the therapy, he said.

“We didn't believe it,” Kathy said of her husband's physical breakthroughs during the two months in India and the months since he returned home to Grand Junction in February.

‘IT’S NOT A MIRACLE CURE’

When Rusty and Kathy arrived at the Nu Tech Mediworld medical center in Delhi in early December, they met with Dr. Geeta Shroff, the infertility expert behind the embryonic stem cell therapy offered at the clinic.

Shroff asked for a goal-setting session before beginning treatment. Listing expectation is not something Rusty wanted to do.

“If you have expectations and you don't meet them you will be disappointed,” he said. “If you have hope and positive things come from that, then you feel like you're not disappointed.”

To appease Shroff, Rusty said, he wanted to regain some bladder and bowel control.

About four hours after Rusty's first stem cells injection, he had increased spasticity, when certain muscles contract uncontrollably, in his legs and butterflies around his stomach, he said.

“I hadn't felt that — ever,” Rusty said. “I was like, what the heck is going on? You didn't think it would be working that fast. Dr. Shroff asked me the next morning if I had experienced any sensations.”

“When he told her about the butterflies, she was ecstatic,” Kathy said. “She was saying, ‘Oh, that means you are going to get some bladder control back.’ ”

For the next two months, Rusty received stem cell therapy in several ways: twice-daily injections into his upper arms, three weeks of intravenous stem cell fluids, and five large injections near his spinal cord at the point of his initial injury — the thoracic 10 vertebrae.

Rusty was never told how many stem cells he received, and he doesn't know exactly how and why Shroff's treatments work. Shroff hasn't publicized her procedures because she is seeking a patent for her therapy in many countries across the globe, including the United States, Rusty said.

“They gave me one (injection) in my fourth lumbar, and it stinkin’ hurt,” Rusty said. “I felt them prick the skin, and I felt it when they did the epidural. I still have pain in that area, which is below my level of injury, so they were all excited.”

In addition to stem cell injections, Rusty spent six days a week for two months in physical therapy, or “physio” as the Indian nurses called it.

The mornings were for stretching and repetitive motions such as walking. In the afternoons, Rusty went back for several additional hours to work on standing and more walking.

Many of the same exercises he did in India he still does in his Grand Junction home.

“It’s not a miracle cure,” he said. “It gives you hope that you may regain function, but you will have to work for it.”