

# Amazing hypothermia protocol cures gymnast's spinal cord injury

On behalf of Johnston, Moore & Thompson

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A relatively new treatment protocol is providing nearly miraculous results for some victims of [spinal cord injuries](#), reports the Miami Herald. In the case of one 20-year-old gymnast from Florida, hypothermic treatment before surgery appears to have prevented profound paralysis and put him back on his feet just days after the accident.

The young gymnast, a state champion, was practicing for an audition with the Cirque de Soleil when a double flip went badly wrong. He missed and landed squarely on his head.

The young man sustained a bilateral dislocation of his spinal cord. When he arrived at the hospital, he was experiencing a near complete loss of sensation and motor control in his hands, arms and legs, according to doctors at the University of Miami medical school.

The prognosis wasn't good. With this type of injury, two of his vertebrae were dislocated and the spinal cord was being compressed by swelling. The spinal cord is a closed environment, so there is no room for swelling as there is in other injuries. Most patients won't walk again.

Not only will this young man walk again, he walked out of the hospital on his own. He will need no rehabilitation. He is essentially ready to return to practice.

## Chilling treatment reduces swelling at a critical point for spinal cord injuries

The hypothermic treatment that was used so successfully to treat the young Florida gymnast has been in use since 2006, which is relatively new in the medical world. It can be used in both spinal cord and brain injuries where swelling is the main issue.

It won't work on all types of [spinal cord injuries](#) -- if the spinal cord has been cut or severed, the treatment won't help. There are also risks including blood clots and pneumonia.

The gymnast's spinal cord was not cut but badly bruised, however, and he had no other injuries or illnesses that would have complicated the treatment. He was the perfect candidate.

Dr. Steven Vanni, a neurosurgeon of the Department of Neurological Surgery at the University of Miami Miller School of Medicine, performed the procedure on the young man.

"We were able to immediately take him to the operating room and get his neck decompressed and fix the dislocation. Number two, we immediately started him on a hypothermia protocol to cool his body down to 33.5 degrees Centigrade," explained Vanni.

Cooling the patient's body to 33.5 degrees Centigrade (92.3 degrees Fahrenheit) reduces the swelling and inflammation that put pressure on the spinal cord after an injury. That pressure is what damages the spinal cord, so reducing it as quickly as possible is crucial.

The hypothermia treatment was initiated 48 hours before the surgery, and then the patient was gradually warmed for the procedure. The surgery itself took about two hours.

"Most patients don't make a functional recovery and he just walked out of the hospital," said Vanni. A miracle indeed.

**Source:** Miami Herald, "[An injured gymnast, treated with hypothermia, walks out of the hospital](#)," Howard Cohen, February 10, 2011