

**Spinal Cord Injuries (SCI)**

- **Types of Injury**
- **Classification & Terminology**
- **Injuries / Prognosis**
- **At Risk Activities**

**Treatment Options**

- **Coping with the Injury**

**Rehabilitation**

- **Finding the Right Rehab Center**
- **Pediatric Questions**
- **List of Rehab Centers**

**Clinical Trials****At Risk Activities****SUV Rollovers & SCI****Financial Assistance****Spinal Injury News****Spinal Injury Resources****Site Map****Search for information:**


Search

Match:

- any search words
- all search words

**Click Here for a Free Information Packet**

**FOR MORE INFORMATION**

Please call  
**1-800-913-6370**

We will gladly answer your questions and send a free packet with additional information on:

- New treatment options
- New clinical trials
- Doctors
- Research
- Financial Assistance

# Spinal Cord Injuries



**FREE**  
**Spinal Cord Injury Packet**



**Click here to get this important patient information delivered to you quickly!**

## Spinal Cord Injury News - [Return to Menu](#)

### Whatever it takes

She's strapped into what looks like an adult version of a baby walker. Amy Foels doesn't care. "Whatever it takes," she says. She's a long way from her home in Elkader - and the car crash that left her legs paralyzed.

By KEN FUSON  
REGISTER STAFF WRITER

March 27, 2005 - Detroit, Mich. - Amy Foels grabs the metal railing on each side of her for support. A physical trainer bends to adjust the new, bright pink leg braces that prevent her knees from buckling. He wraps a belt around her that he will hold in case she falls. "Feel OK?" the trainer asks. "Uh-huh." "Want to try some steps?" "I'll try it."

Holding herself up with her arms, Amy raises her right leg gingerly and shifts her weight so her foot moves forward. She then looks up, at a full-length mirror, to see if her foot landed properly and if her toes are pointing forward. She hasn't felt her legs since a car accident in 2002 left her paralyzed. She repeats the movement, this time with her left leg.

Then Amy pauses, and lifts both hands an inch or so off the railings, her face displaying the scared, excited look of someone standing on the high-dive for the first time. "I'm trying to balance myself," she says. "I'm not the greatest at it yet."

Guidance: With physical trainer Marcus Ebejer behind her, Amy Foels of Elkader attempts to walk with the use of braces. Foels was paralyzed in a 2002 car accident.

This occurs during the first week of March. Twenty-year-old Amy Foels (pronounced Fells), has come to the Center for Spinal Cord Injury Recovery at the Rehabilitation Institute of Michigan, the latest stop on her crusade to walk again.

She is 550 miles away from her hometown of Elkader, but this journey has taken her much farther.

In January, Amy traveled to Lisbon, Portugal - it was her first trip overseas, her second airplane ride - and became the 36th person in the world to undergo an experimental surgical procedure that has not yet been approved in the United States. The staff in Detroit call her a pioneer.

What else is she willing to do? "Anything."

When will she declare victory? "When I can walk again," she says. "On my own. No assistance."

### **Overcoming the result of one bad choice**

The doctors in Iowa City were adamant: You will never walk again. Amy didn't believe them. "It's almost like my legs told me that."

She had done something stupid; that's how she put it when she addressed a group of Elkader elementary school students not long after the accident. She had skipped school with five other high school seniors in November 2002. They had gotten drunk and headed to Guttenberg.

The car landed in a ditch. Amy was in the back seat, not wearing a seat belt. She's not sure what happened, but she was the only person hurt seriously. She was left paralyzed from below her belly button.

She concluded that she was chosen to get hurt for a reason. She's not sure many of her friends could have handled it. "I had to grow up in a hurry," she says.

Relatives say Amy wasted little time feeling sorry for herself. She had plans. She wanted to learn how to care for herself. She wanted to learn how to drive a car.

She wanted to learn how to walk well enough to collect her diploma from Central High School. "She was one of those students who looked at life as a real gift and wanted to do something with it," says Diana Vittengl, a Central guidance counselor at the time.

Vittengl heard Amy talk to those Elkader elementary students. Look at me, she told them. Look at what getting drunk can do to you. Look at how one bad choice can affect the rest of your life. But there was another message as well: Watch how I deal with this. "They could tell she was going to make something of herself," Vittengl says.

On graduation day, Amy was helped to her feet. A heavy metal bar connected her old leg braces. She pushed herself forward by leaning on crutches and swinging her legs in front of her. Her arms did most of the work.

You couldn't really call it walking - Amy wouldn't - but it was enough to bring the crowd to their own feet for a rousing and tear-filled ovation.

"When she makes up her mind, she's going to do it," says Donna Foels, Amy's mother. "She's not going to give up."

Which is why, when Amy and her fiance, Brent Duffy, saw a television program about a new stem-cell treatment in Portugal

that had shown early promise in helping people with spinal cord injuries, Ron and Donna Foels knew there was little use trying to talk Amy out of volunteering.

"A very quiet, hard worker"

The physical trainer, Marcus Ebejer, 26, who works with Amy for three rigorous hours every weekday afternoon at the Detroit center, now wants to place her in something called a Second Step. Staff members joke that it looks like an adult version of a baby walker. That's fine with Amy. She'll try anything.

But this is different. Gone are the braces with the heavy metal bar connecting each leg that she wore during her high school graduation. She recently received new, form-fitted braces - they cost \$10,000 - that allow her legs to move independently. The walker will force her to place most of her 122 pounds on her legs instead of her arms. Ebejer straps her in. "Shift your weight," he instructs. "There you go."

Amy moves cautiously. She grips the side of the walker so hard her knuckles turn white. She steps forward with her right leg. "Oh, my God," she says. "This is a lot harder."

Duffy, 21, her fiance, is on spring break from the University of Dubuque. He stands a few yards away, holding a full-length mirror in her path, so Amy can watch her feet.

She moves on a short track, one-sixteenth of a mile in length, that is divided into four lanes marked:

WALK  
JOG  
RUN  
WHEEL

Amy inches forward in the WALK lane. Her face is red. After only a few minutes, sweat begins to pour. "This is definitely a lot different," she says.

She doesn't complain. No matter what they throw at her, she never protests. "Amy is just a very quiet, hard worker," says Dr. Steven Hinderer, medical director of the rehabilitation center. "She just comes in, every day, with her determined face, and works her tail off."

There are no promises here. Nobody has told Amy she will someday cast aside her wheelchair. Even so, it's clear that the staff and the 25 or so patients believe they're leaders in improving the way people with spinal cord injuries are treated and rehabilitated.

One researcher, Jean Peduzzi-Nelson, was so impressed with the potential benefit of this approach that she left her job at the University of Alabama-Birmingham to work at Wayne State University and the Detroit Medical Center, which are affiliated with the Rehabilitation Institute of Michigan.

"I want to be involved in bringing this forward," she says. "I think it's definitely OK to be enthused."

The center, which opened 10 months ago, offers an aggressive rehabilitation regimen to patients, many of whom have participated in experimental surgical procedures throughout the world.

The most promising, and controversial, new approaches involve stem-cell transplants. A researcher in China, for example, has transplanted stem cells from aborted fetuses into injured patients.

But another researcher, Dr. Carlos Lima of Portugal, has discovered a method of using stem cells that has even earned the Vatican's blessing.

He removes olfactory tissue from the injured person's nasal cavity, then transplants the tissue into the damaged portion of the person's own spinal cord.

Since he began in 2001, Lima has operated on about 50 patients, and all but one have reported some physical improvement (that person had a second, undetected spinal injury). Several say they can now walk with the aid of leg braces.

The Detroit center refers patients to Lima - Amy was one of them - and expects to apply for approval from the U.S. Food and Drug Administration to perform the surgery in this country. But the FDA will require more than anecdotal success stories.

No such thing as false hope

Hinderer, director of the Detroit facility, has heard the complaints. "I've had phone calls from physicians who have said, 'You're giving people false hope,' " he says. "I don't understand the term 'false hope.'"

"If you have no hope, what's false? If you're upfront and you tell people, 'We don't know if this works, but you're welcome to try,' where's the falsity in that? It's a personal decision whether you choose to pursue it or not."

Lima's approach relies on research - his own and others' - that shows olfactory tissue contains cells that regenerate quickly and may help repair damaged tissue in the spinal cord. He's the first to transplant olfactory mucosa directly into the injured area.

"I'm enthused because there is a growing body of evidence that this is a reasonable path," Hinderer says.

But that won't matter until Lima's human studies are published in a peer-reviewed journal. The first of his studies has just been submitted for publication.

Although the Portugal surgical procedure has created great buzz

on Web sites devoted to patients with spinal cord injuries, Dr. Wise Young, director of the W.M. Keck Center for Collaborative Neuroscience at Rutgers University, has urged caution.

"Several people on these forums who have had the surgery appear to be recovering some function," he wrote on one of the Web sites. "Unfortunately, to date, there has not been a publication of the results so . . . we do not know what proportion of the people recover function, to what extent, and for how long."

Peduzzi-Nelson, the researcher who left her old job to join the team working to bring Lima's technique to the Detroit Medical Center, helped Lima submit the paper describing the results of his first seven patients.

She says some researchers will question the findings, which they are supposed to do. As for the rest of the scientific community, "I think they're going to say 'Wow' when they see it."

Peduzzi-Nelson met Lima several years ago when she invited him to speak at the University of Alabama-Birmingham. She was so impressed that she began evaluating his methods. Her tests involved rats with severe, chronic spinal cord injuries.

Using Lima's approach, she says, the rats showed the greatest improvement in functional skills she has seen in 13 years of testing them. She repeated the study and achieved similar results.

"I have told people I think it's the very best thing that's out there right now," she says.

As for patients like Amy Foels, "these people are like astronauts," she says. "They're going into the unknown, and they've made a decision about their life. And they have to train like Olympic athletes." "It's a wheelchair. Get over it."

Standing in the walker, Amy only advances about a quarter of the tiny track in 30 minutes. She looks like she's been running a marathon. "You look pretty red," Brent tells her. "YOU do this!" she counters. She pauses. "Wait a second," she says. "I needed to get my balance." There's nothing easy about any of this.

It wasn't easy when good friends from high school stopped calling or visiting not long after the accident. Amy says she's over it now, but the hurt in her voice is easy to detect. "It's a wheelchair," she wants to tell them. "Get over it."

It wasn't easy to make friends at Kirkwood Community College in Cedar Rapids, where she plans to resume classes this summer. "Nobody will look me in the face or talk to me unless we do a project together."

And it isn't easy being 550 miles away from home in a strange city, without her family, without her car, and without her dog,

Lacy. "She gets homesick," her mother says.

On March 17, Amy skipped therapy for the first time. She says she stayed in her room in Detroit and cried most of the day. She missed everyone so much. Two days later, her determination restored, she agreed to remain in Detroit for at least one more month of rehabilitation. She wants to show the male patients in rehab - she's the only woman in the afternoon session - that she can keep up with them.

She wants to see how much better she can do. She wants to walk down the aisle at her wedding. "I always wanted to be an inspiration," she says. "I want people to look at me and say, 'Look, she did it.' "

She should have heard Jason Feasel, 25, of Battle Creek, Mich., a former college football player who was paralyzed in a motorcycle accident. He noticed how hard Amy was working on the track. "That looked like walking to me," he says.

A little better each day

Remember: It was three weeks ago when Amy struggled the first time she was placed in the walker. These days, Amy Foels can complete an entire lap around the track in less than 30 minutes. She gets a little better each day.

She now can flex the hip muscles that control leg movements; she couldn't do that before the surgery. She now can balance herself on all fours; she couldn't do that, either. She's getting stronger and gaining more balance. "Her steps have improved a ton," Ebejer says.

The amazing thing is, doctors don't expect the cell transplant to begin producing results for at least three months and perhaps not for two years. Amy won't hit the three-month mark until April 7. Her greatest gains may lie ahead of her.

Most of the improvement Amy has enjoyed so far probably is the result of removing scar tissue from her damaged spinal cord and of the hard rehabilitation work she has completed, Hinderer says. "I can't wait to find out what happens tomorrow," Amy says.

She already is planning to spend summer nights walking along a pond in Elkader. She probably will still need her leg braces, and perhaps a walker, but you never know. Her goals certainly look closer than they did before the surgery.

As far as Amy serving as an inspiration to others, allow Melanie Henniges of Sumner to field that one. She's 35, the mother of three, and she was paralyzed in a car accident in July 2002. She has visited with Amy. "She's my role model, or my angel, or however you want to put it," Henniges says. "She's definitely my hero."

Their conversations resulted in a decision. Henniges leaves for Portugal on April 12. Dr. Lima has scheduled her for surgery

four days later.

**To Obtain the Best Treatment Info & Financial Assistance Contact us for a FREE SPINAL CORD INJURY INFORMATION PACKET which includes;**

- |                                   |                       |
|-----------------------------------|-----------------------|
| Rehabilitation Hospital Locations | New Treatment Options |
| Clinical Trials                   | Doctors               |
| Research                          | Financial Assistance  |

**Fill out the form below or call 1-800-913-6370.**

First Name

Last Name

Address

City

State

Zip

Phone

Email

**Have you or a loved one had :**

Spinal Cord Injury (paraplegic)?  Yes  No

Spinal Cord Injury (tetraplegic) / (quadriplegic)?  Yes  No

**How was you or your loved one injured?**

Car or SUV Accident:  Yes  No

Car Rollover:  Yes  No

SUV Rollover:  Yes  No

Vehicle Roof Crush Injury:  Yes  No

Tire Failure:  Yes  No

Work Related:  Yes  No

Gun Related:  Yes  No

Swimming Pool Injury:  Yes  No

Other Accident:

Yes  No

Disease:  Yes  No

Age of Injured Person:

Date Injury Occurred:

Please tell us what happened:

[Click once to submit the form](#)

[Sitemap](#) | [Spinal Cord Injury Types](#) | [Sport Utility Vehicle Rollovers](#) | [Injury Classification](#) | [Spinal Injury Prognosis](#) | [Spinal Cord Injury Risk](#) | [SCI Treatment Options](#) | [Coping with Spinal Cord Injuries](#) | [SCI Rehabilitation Units](#) | [Finding a Rehab Center](#) | [Pediatric Programs](#) | [SCI Rehabilitation Centers](#) | [Spinal Cord Clinical Trials](#) | [SUV Rollovers](#) | [Financial Assistance](#) | [Spinal Cord Injury](#) |