

Denver Area Woman Experiences New Freedom with Help of Computer-controlled Sensor Walk™

Says high-tech orthotic brace is key to getting her where she wants to be

A fall on the ice during a Colorado winter four years ago changed Barbara Rupert-Nickel's life in ways she never could have imagined.

"I experienced severe injury to my back, including a compressed spine and herniated disks," she says. "The pain was overwhelming and something even four surgeries could do little to alleviate."

Because of the extreme pain, Barbara was unable to move in a natural way and her legs also began to suffer damage. Weakness and balance problems required her to walk with a cane and even resort to using a wheelchair, and she also had to deal with the troubling prognosis from her doctors that it was unlikely her condition would ever improve.

In an effort to gain back at least some mobility, Barbara was fit with a traditional knee-ankle-foot orthotic device, but it couldn't offer the stability her condition required. It wasn't until she visited Creative Technology Prosthetics and Orthotics (www.ctechprosthetics.com) and began working with Certified Prosthetist Orthotist Christian Bailey that she felt some hope she might one day regain her independence.

According to Christian, "Working closely with Barbara's physician we came to the conclusion that typical solutions weren't going to work because of her especially debilitating condition. But a recent product on the market, the computer-controlled Sensor Walk orthotic device, was proving very promising in challenging cases like Barbara's and we were excited to give it a try."

Developed in cooperation with the Mayo Clinic, the computer-controlled Sensor Walk from Otto Bock HealthCare uses special pressure sensors in the footplate of the orthosis and a microprocessor in the actual knee joint to safely control a user's movement. Custom fabricated for each user, the Sensor Walk quickly detects whether a person is walking or standing still and adjusts accordingly to give instant stability. The Sensor Walk



also knows to flex when the user swings their leg to take another step, but is ready to support them even before their foot hits the ground which means much less energy is required to walk than would be necessary with a traditional KAFO.

When Barbara was fit with the high-tech orthotic device, the results were instantaneous and remarkable

“The moment Barbara put on the Sensor Walk she was able to get up out of her chair without assistance and walk around without her cane, and she even took the stairs,” says Christian. “It was amazing to see the immediate and dramatic improvement in her mobility and stability and very rewarding to see the huge smile on her face.”

In addition to lessening the pain that had become a constant part of her life and getting her legs and balance back, something else was returned to Barbara that most people take for granted.

“Now that I don’t have to use a cane my hands are free once again. It’s something you don’t think about until you’ve lost it, but not having my hands free meant I couldn’t easily use a drinking fountain or even carry my purse or jacket,” says Barbara. “Having to accept I can’t do anything about the persistent pain I continue to experience, it’s a relief to regain control in other aspects of my life.”

###

Minnesota-based Otto Bock HealthCare LP was established in 1958 as the Americas corporate headquarters of Otto Bock HealthCare, GmbH, based in Duderstadt, Germany. Otto Bock has more than 3,800 employees worldwide and produces over 25,000 types of prosthetic and orthotic components, mobility and rehabilitation products, and is the U.S. leader in delivering continuous passive motion (CPM) services and related therapies. (www.ottobockus.com)