Bioness Hand Rehabilitation System Increases Function and Confidence

Recovering from a stroke or traumatic brain injury can sometimes be a lifelong process, requiring dedication from the patient and a reservoir of patience and resources from the therapist.

Helping to regain functionality in the upper extremities, the Bioness H200 Wireless Hand Rehabilitation System has become an invaluable part of the regimen prescribed by occupational therapists across the country.

Ashley White Gustaveson, COTA/L, of SWAN Rehab in Phoenix, says, “With the H200, I have people who haven’t seen their hand open or close in years, and when they see it for themselves, it gives them the motivation they need to keep pushing forward. The H200 is wonderful device to have in our ‘toolbox.’”

The Bioness H200 Wireless Hand Rehabilitation System uses advanced technology that delivers low-level electrical stimulation to activate the nerves that control the muscles in the hand and forearm, which helps “train” or re-educate weak or paralyzed muscles. With assistance from the H200, wearers can reach, grasp, open and control the hand.

The system is wireless, so it fits the needs of daily life. The device has two major components: the sleek, lightweight orthosis that fits comfortably on the wrist and hand, and a remote control to adjust the unit.

The orthosis houses the electrodes that deliver the muscle stimulation. Both patients and therapists report that it’s intuitively easy to use.

Meredith Grinnell, MS, OTR/L, CBIS, at Spaulding Rehabilitation Hospital in Boston, has used the H200 on patients that range from recent stroke patients just starting their journey to recovery, to a bass player looking to speed his progress after a spinal cord injury.

“Our H200 is in almost constant use. It has a fun, high-tech look that people are automatically drawn to,” Grinnell said. The appeal goes far beyond the appearance: The device doesn’t pinch or pull at the skin, and the perfect placement of the electrodes means no gluing and sticking, so there’s no residue on the skin.

And the fact that you only need one device for both flexion and extension makes it very versatile,” added Grinnell.

Even with the H200’s comfortable, ergonomic design and advanced technology, Grinnell insists one of the system’s biggest benefits is the mental edge it gives to patients.

“Patients put it on and see and feel their hands move normally. We can progress so the patient is doing the triggering. It gives them that little ‘bump’ they need and makes them feel positive,” Grinnell said.

Gustaveson was impressed with the science even before she saw the H200 in action. “Functional electrical stimulation has been shown to have real benefits in the rehabilitation of the upper extremities, and there aren’t many other treatments that can say that,” she said.

Gustaveson adds that the decision to purchase the H200 system was an easy one for SWAN. “We emphasize the latest research and technology, and the tools that give the best possible care and provide greatest possible chance of returning to normal life,” she said.

Because of the Bioness H200 Hand Rehabilitation System’s success at Spaulding, Grinnell reported that some patients have decided to purchase the system for home use, to supplement what they were doing in therapy.

“One patient was so impressed with what we’d been able to do in just a single session, she decided to purchase it,” Grinnell recalled. “After a month, when I saw her, I saw improvements immediately, especially with muscle tone. Seeing what she achieved in just one month — imagine how far you can go in five or six.”

For more information on the H200 Wireless Hand Rehabilitation System visit www.bioness.com.