

Robotic rehab - how a determined 7-year-old has become stronger than ever



Anna Good waited patiently for her mom, Susie Good, to fasten her feet in the Velcro straps on the pedals of her light pink tricycle.

Once Anna's feet were in place and she was turned around, she pedaled between two pickup trucks in the driveway and down to the sidewalk in front of the red brick house she and her parents moved into just months ago.

Anna wore pink and blue Crocs and a pink bow in her blonde hair. She smiled as she rode. It was the same smile she used when she talked about turning 7 in May and all of her birthday presents.

"Lots of toys," she said, describing one as a "big-girl bike." The new pink bicycle is her favorite color, but since it has only two wheels, her dad, Kelly Good, will add training wheels to keep her stable.

Anna, who has cerebral palsy, really wanted the bike, so her parents told her they would make it work, even if it's a challenge.

For now, she enjoys riding her tricycle. With each push, the West Lafayette girl gets stronger. And riding her big-girl bike may not be too far off, thanks in part to a relatively new pediatric therapy that utilizes robots.

Anna was one of the first patients to use the Robotic Rehabilitation Center at Riley Hospital for Children in Indianapolis. The center, which opened in September, is believed to be the only one in the country that has three different robots for pediatric use.

Anna has used two of the robots. Their constant, controlled repetition helps train her brain to do everyday motions and has improved her movements and endurance.

"Robotic rehabilitation is still in the early stages," said Ryan Cardinal, Anna's physical therapist at the center. Specific long-term benefits and how long Anna will have to continue robotic rehab are unknown, but improvements in the short term provide hope for future advances.

A collaboration among Riley, Indiana University Health Rehabilitation Services and the IU Department of Physical Therapy the center focuses on both clinical and research aspects for pediatric robotic rehab.

Source:

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