'Rewiring' The Brain: Novel Therapy Seeks To Improve Recovery After Stroke

Electrical nerve stimulation could help patients regain motor functions sooner

The Ohio State University Wexner Medical Center

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NEWS PACKAGE

NEWS FACRAGE						
SUGGESTED TEASE	PEOPLE WHO HAVE SUFFERED A STROKE OFTEN FACE A LONG ROAD TO RECOVERY. COMING UP, A NEW CLINICAL TRIAL THAT COULD HELP THEM REGAIN FUNCTION FASTER. THAT'S NEXT IN HEALTH NEWS.					
ANCHOR LEAD	STROKE IS THE LEADING CAUSE OF DISABILITY IN THE UNITED STATES ¹ . FOR MANY, A STROKE AFFECTS THE MOBILITY OF THEIR ARMS AND HANDS, MAKING EVERYDAY, ROUTINE ACTIVITIES DIFFICULT. BUT THERE'S A NEW CLINICAL TRIAL THAT'S GIVING HOPE TO THE MORE THAN 800-THOUSAND AMERICANS WHO SUFFER STROKES EACH YEAR ¹ . BARB CONSIGLIO HAS MORE.					
(PACKAGE START)						
CG: Courtesy: The Ohio State University Wexner Medical Center :00 - :03	(Nats of therapist - "You're going to pick one up and then put it in here." :02)					
Shots of Ken picking up objects in rehab	AFTER SURVIVING A STROKE, KEN MEEKS CONTINUES TO RECOVER, BUT SOME TASKS STILL TAKE LONGER THAN HE'D LIKE. :07					
CG: Ken Meeks Stroke survivor	"Nearly everything you do is a two-handed thing. You don't realize it." :05					
Shots of Ken cutting dough in rehab	LOSS OF MOTOR FUNCTION IS A COMMON SIDE EFFECT - ONE THAT CAN TAKE YEARS TO RECOVER. WHICH IS WHY EXPERTS AT THE OHIO					
Shots of implant surgery	STATE UNIVERSITY WEXNER MEDICAL CENTER ARE TESTING A NEW APPROACH TO STROKE THERAPY, USING AN IMPLANTED DEVICE TO HELP REWIRE CIRCUITS IN THE BRAIN. :12					
CG: Dr. Marcie Bockbrader Ohio State Wexner Medical Center	"The idea is to combine this brain pacing with normal rehabilitation therapies and see if patients who've been through all of the other usual therapies after a stroke can get even better." :12					

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Shots of Dr. Bockbrader in office

Shot of therapist adjusting implant receiver Shots of Ken flipping cards in rehab

DR. MARCIE BOCKBRADER (bock-BRAID-er) IS LEADING THE STUDY WITH THE VIVISTIM VAGUS NERVE STIMULATOR. SHE SAYS THE NERVE STIMULATION IS LIKE TURNING ON A SWITCH, MAKING THE PATIENT'S BRAIN MORE RECEPTIVE TO THERAPY. :08

Dr. Bockbrader (CG'd earlier)

"What we're trying to do with this is rewire the brain so that it will allow people to use their bodies the way they used to." :07

Shots of Ken flipping cards in rehab

Closeup of therapist pressing the button

Graphic to show how the nerve sends the pulse to the brain

Shots of Ken doing rehab exercise

Shots of Ken opening bottle of wine with wife

Ken Meeks (CG'd earlier)

Shots of Ken and wife drinking wine

(PACKAGE END) -----

ANCHOR TAG

THE NOVEL THERAPY IS USED IN CONJUNCTION WITH TRADITIONAL REHAB. WHEN AN EXERCISE IS PERFORMED CORRECTLY, THE THERAPIST PRESSES A BUTTON, DIRECTING THE DEVICE TO STIMULATE THE VAGUS NERVE - WHICH CARRIES INFORMATION FOR MOTOR FUNCTIONS WITHIN THE BODY². THIS SIGNALS THE BRAIN TO STORE THAT MOVEMENT TO MEMORY.

THEN, PATIENTS ARE EVALUATED IN COMPARISON TO THEIR PRE-THERAPY SCORES. :14

Nats of Ken talking to therapist - "I can do these faster, and I'm not quite as tired when I get home." :06

BECAUSE THIS IS A CLINICAL TRIAL, KEN'S NOT SURE IF HE'S ACTUALLY GETTING THE STIMULATION OR NOT. BUT AS FAR AS HE'S CONCERNED, THERE IS NO SUCH THING AS TOO MUCH THERAPY.:08

"I truly believe, I still believe that it will be a help." :06

AT OHIO STATE WEXNER MEDICAL CENTER, THIS IS BARB CONSIGLIO REPORTING. :04

THE CLINICAL TRIAL WILL FOLLOW PATIENTS FOR AT LEAST A YEAR TO STUDY THEIR IMPROVEMENT. RESEARCHERS ARE HOPING THAT WHAT THEY LEARN WILL NOT ONLY IMPROVE THE LIVES OF PATIENTS WHO HAVE HAD A STROKE, BUT THAT THEIR FINDINGS COULD ALSO HELP THOSE WHO HAVE SUFFERED SPINAL CORD AND TRAUMATIC BRAIN INJURIES.

SOCIAL MEDIA

Share it! Suggested tweet:

Stroke is the leading cause of disability in the United States. How a new clinical trial at @OSUWexMed is helping patients recover sooner. http://bit.ly/2l1aSLY



More than 800,000 people in the United States suffer a stroke every year. For many, it affects the ability to use their arms and hands. But a new clinical trial at The Ohio State University Wexner Medical Center is giving hope for a quicker recovery to the more than two-thirds of stroke patients who are left with a disability. http://bit.ly/2l1aSLY

EXTRA BITES

Bockbrader talks about the initial evaluations of VNS used in stroke patients:

"In the chronic phase when people looked like they were done getting better, could be used to boost the effective therapy, so sort of supercharged therapy. People were once again in a state where they were able to change and recover more quickly through the use of this stimulation."

Bockbrader talks about the purpose of the magnets to use with

the electrical device:

CG: Dr. Marcie Bockbrader **Ohio State Wexner Medical Center**

"That's why we give people magnets to use with their therapies and turn the system on to activate the brain so that when they go and do their occupational therapy to work on their hand function, the brain is really ready to make those new connections that happen when they do their therapy."

Bockbrader talks about the benefits of the VNS treatment: "The benefits of VNS treatments, we think, are more efficient, better response to therapies. So we think that approximately 85% of the people who get this type of stimulation are likely to benefit from it."

CG: Ken Meeks Stroke survivor

Ken talks about what motivates him to keep going: "A driving force is very hard to find, but I believe that life only goes in one direction. You either lie down and stagnate, or you move forward. So I'm doing everything I can to move forward."

Ken says losing motor function in his arm affected his daily life: "Your arms are part of your balance, and when you don't have this arm to move over there to stabilize you, it affects all of your walking, it affects your standing, let alone just making yourself a cup of coffee and getting sugar."

References

¹What is Stroke? National Stroke Association. Online: http://www.stroke.org/understand-stroke/what-stroke.

²Everything you need to know about the vagus nerve. **Medical News Today.** Online: https://www.medicalnewstoday.com/articles/318128.php

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