Study: Playing Brain Games Before Surgery Helps Improve Recovery

Practicing "neurobics" preps the brain for surgery and prevents postoperative delirium

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The Ohio State University Wexner Medical Center		
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NEWS PACKAGE

SUGGESTED TEASE	YOU MAY FIND YOURSELF KILLING TIME WITH A WORD GAME OR PUZZLE ON YOUR PHONE, BUT A NEW STUDY FINDS PLAYING THESE SIMPLE GAMES LEADING UP TO SURGERY CAN ACTUALLY HAVE MAJOR MEDICAL BENEFITS DURING RECOVERY. DETAILS, COMING UP.
ANCHOR LEAD	RECOVERING FROM SURGERY CAN BE A SLOW AND DELICATE PROCESS, BUT IN RECENT YEARS DOCTORS HAVE WORKED TO MAKE THE DAYS AFTER SURGERY A LITTLE EASIER WITH WHAT THEY CALL "PRE-HABILITATION," ENCOURAGING PATIENTS TO PREPARE THEIR BODIES FOR SURGERY BY EXERCISING, EATING A BALANCED DIET AND CONTROLLING CHRONIC CONDITIONS. NOW A NEW STUDY' FINDS THAT PREPARING THE <u>BRAIN</u> BEFORE SURGERY IS JUST AS IMPORTANT AS PREPARING THE BODY TO AVOID SERIOUS COMPLICATIONS AND GET YOU BACK ON YOUR FEET AS SOON AS POSSIBLE. BARB CONSIGLIO HAS THE DETAILS.
CG: Courtesy: The Ohio State University Wexner Medical Center	(Nats - Sound) :02
:00 - :03 Shots of Sarah playing solitaire	SARAH SIELING (SEE-ling) HAS ALWAYS ENJOYED GAMES LIKE SOLITAIRE AND SUDOKU PUZZLES, SO WHEN SHE WAS ASKED TO PARTICIPATE IN A STUDY THAT REQUIRED PLAYING BRAIN GAMES LEADING UP TO HER BACK SURGERY, SHE WAS HAPPY TO HELP. :10
CG: Sarah Sieling Study participant	<i>"He said, it was to hopefully stop me from having delirium after the surgery. I said, 'Sure, I want this to be over with quickly.'"</i> :11
Shots of surgery	POST-OPERATIVE DELIRIUM IS ESPECIALLY COMMON IN OLDER PATIENTS AND CAN HAVE SERIOUS CONSEQUENCES INCLUDING LONGER

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Shots of Dr. Humeidan	HOSPITAL STAYS, SLOWED RECOVERY AND EVEN AN INCREASED RISK OF DEATH. YET EXPERTS DON'T HAVE MANY TOOLS TO PREVENT IT. BUT DOCTOR MICHELLE HUMEIDAN (hue-MIH-dee-an), AN ANESTHESIOLOGIST AT THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER, BELIEVED THE BRAIN COULD BE PREPARED FOR SURGERY JUST AS THE BODY CAN. :19
CG: Dr. Michelle Humeidan Ohio State Wexner Medical Center	<i>"I thought there might be a way to use brain exercise or having an active mind immediately before surgery to offset the risk of delirium post-op." :</i> 09
Shots of woman playing games on tablet	EXPERTS CALL THIS BRAIN EXERCISE "NEUROBICS," WHICH IS DESIGNED TO CREATE NEW NEURAL PATHWAYS AND IMPROVE COGNITION. IN A NEW STUDY, DOCTOR HUMEIDAN AND HER TEAM GAVE TWO-HUNDRED FIFTY-ONE PRE-OP PATIENTS OVER THE AGE OF SIXTY A TABLET LOADED WITH A BRAIN-TRAINING APP. :13
	(Nats of Lumosity game) :01
Dr. Humeidan (CG'd earlier)	<i>"Our control patients had a higher risk of delirium than the patients that did the intervention." :</i> 05
Shots of woman playing games on tablet Graphic: Neurobics Study Reduced risk of postoperative delirium -56%, 5-10 hours -61%, 10 or more hours	AND THE MORE THEY PLAYED, THE BETTER THEIR RESULTS. THOSE WHO PLAYED A TOTAL OF FIVE TO TEN HOURS OF BRAIN GAMES OVER THOSE TEN DAYS DECREASED THEIR RISK OF DELIRIUM BY MORE THAN HALF, AND THE RATE OF DELIRIUM DROPPED BY MORE THAN SIXTY PERCENT IN PATIENTS WHO COMPLETED THE PRESCRIBED TEN HOURS OR MORE. :14
	(Nats) :01
Shots of Sarah walking outside	SARAH SAYS THE GAMES WERE A FUN DISTRACTION WHEN HER BACK TOOK HER OUT OF COMMISSION. :04
Sarah Sieling (CG'd earlier)	<i>"I would do them sometimes a couple of times a day, depending on how bored I was. Cause I couldn't do a lot."</i> <i>:05</i>
Shots of Sarah gardening	AND TAKING A LITTLE TIME TO IMPROVE HER MENTAL FITNESS WAS AN EASY WAY TO HELP GET BACK TO THE THINGS SHE LOVES.
(PACKAGE END)	AT THE OHIO STATE WEXNER MEDICAL CENTER, THIS IS BARB CONSIGLIO REPORTING. :09
ANCHOR TAG	

	PATIENTS WHO DIDN'T PLAY BRAIN GAMES WERE
	ALSO MORE LIKELY TO BE ADMITTED TO THE I-C-U
	DURING THEIR POSTOPERATIVE HOSPITAL STAY.
	RESEARCHERS SAY THE TABLET APP WAS AN
	IDEAL WAY TO TRACK PATIENTS IN THE STUDY, BUT
	THAT DOING CROSSWORD PUZZLES, READING THE
	NEWSPAPER OR PRACTICING ANY OTHER ACTIVITY
	THAT CHALLENGES YOUR MIND WOULD LIKELY
	REAP THE SAME BENEFITS.

SOCIAL MEDIA

Share it! Suggested tweet:	Do you have a favorite word game on your phone or tablet? A new study by <u>@OSUWexMed</u> finds practicing "neurobics" can help prep the brain for surgery and prevent serious complications during recovery. <u>https://bit.ly/320uQ2N</u>
Suggested post:	Your doctor may recommend diet and exercise as "pre-habilitation" before major surgery, but a new study by researchers at <u>The Ohio State University Wexner Medical</u> <u>Center</u> finds preparing the brain for a major procedure is just as important as preparing the body. Patients who practiced "neurobics" by playing brain games in the days leading up to surgery greatly reduced their risk of postoperative delirium and the serious health consequences that come with it. <u>https://bit.ly/320uQ2N</u>

EXTRA BITES

	Humeidan explains the medical complications of delirium: "If you're not able to pay attention and you're not really engaging with your environment or you're confused, you're not going to be able to do a lot of the things that you need to do to get back to your baseline. You might not be eating quite right. You might not be communicating when you're in discomfort so that your pain is not well controlled." :19
CG: Dr. Michelle Humeidan Ohio State Wexner Medical Center	Humeidan states the results of the study: <i>"In the patients that were at least minimally compliant with our intervention, meaning they played some brain exercise, the risk of delirium was lower compared to our control patients who did no brain exercise before surgery." :13</i>
	Humeidan says adding neurobics to a pre-op plan can help: <i>"In addition to doing the other things that we know are</i> <i>good for you, like getting good nutrition, getting physical</i> <i>exercise, working on stress relieving techniques, all of</i> <i>that to kind of prepare for surgery. If you can add in some</i> <i>brain exercise of some sort in addition to that, it definitely</i> <i>won't hurt and it might help." :18</i>

	Sarah explains why she needed surgery: "Every time I stood up, one of the vertebrae would move and pinch a nerve. So they had to fuse the vertebraes together." :09
CG: Sarah Sieling Study participant	Sarah says she recommends neurobics leading up to surgery: <i>"I definitely would recommend it. You have nothing to lose</i> <i>and I didn't have any problems after the surgery." :08</i>
	Sarah says she's worked to keep her mind active since retirement: <i>"When I got ready to retire from working, I decided that I was going to keep my mind active by doing several things and one was to Sudoku puzzles." :10</i>

References

¹Impact of Cognitive Prehabilitation on the Incidence of Postoperative Delirium Among Older Adults Undergoing Major Non-Cardiac Surgery, **JAMA Surgery, Nov. 11, 2020**. Online: <u>put link here</u>.

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