

Exciting new technology is revolutionizing the way surgeons care for their patients. With the help of Virtual Reality, surgeons are now able to perform medical procedures with ease.

With rattling nerves and anxiety, six-year-old Gavin spent his Wednesday morning having reconstructive surgery on a tumor in his hand. As a younger patient with considerable anxiety, Dr. Raymond B. Raven, an orthopedic surgeon specializing in hand and upper extremity surgery, saw an opportunity to use Virtual Reality as an alternative to ease Gavin's anxiety and fear.

Under normal circumstances, pediatric patients are given Versed, a pre-op medication used to cause drowsiness and help decrease anxiety. However, the effects of this drug, including side effects such as nausea, can continue to linger after surgery and throughout the day. ***"If we can avoid giving them pre-medication often times its preferable"*** stated Dr. Brain Lee, the anesthesiologist for Gavin's surgery. Often times this seems to be a constant struggle for nurses and physicians due to the uneasiness a patient encounters when coming out of sedation.

But for Gavin, he was given the chance to experience something new. As Dr. Raven brought out the headset, Gavin was immediately intrigued. "He was interested in wearing it right away," said Dr. Raven. In a matter of seconds, Gavin was immersed in the distracting games projected in the headset. He was placed in an environment that made him feel right at home, remarkably less anxious and ultimately made his experience, as well as the hospital staff's, one to remember.

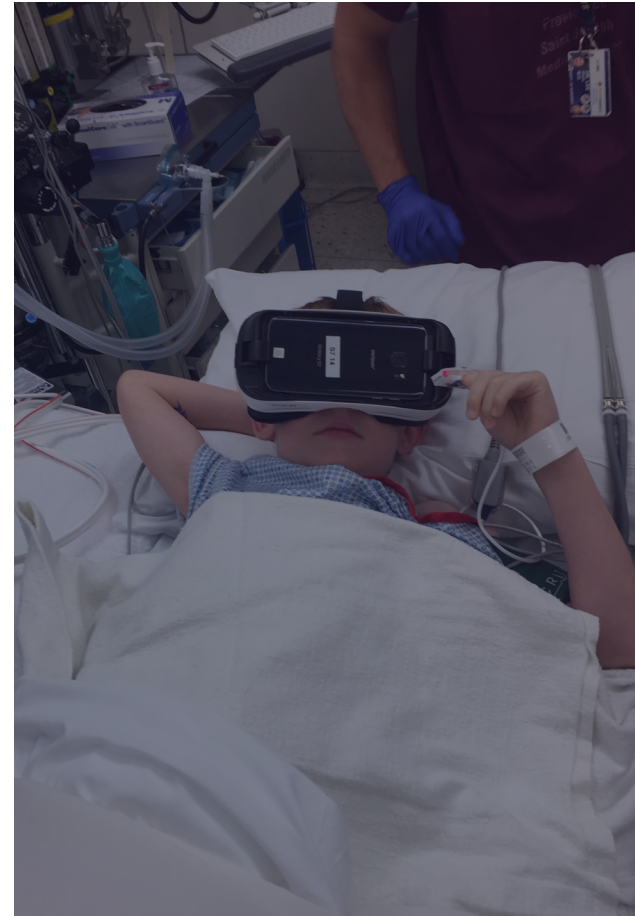
Leading by Example

Having a surgery at such a young age is considerably a scary thought, not just for the child, but for his parents, too. ***"The more anxious the parents are, the kids begin to feel the same way and vice versa,"*** stated Dr. Raven. Fortunately, the headset drastically reduced everyone's anxiety about the procedure making it correspondingly easier for the doctor, anesthesiologist, and nurses who took part in Gavin's surgery.

After the surgery was over, Gavin was taken back into the post-op recovery room. When he gained consciousness from the general anesthesia administered, he had no signs of anxiety. He was so thrilled to have used the headset and he immediately wanted to tell everyone about his experience which included "red bears, blue bears and bears with mustaches and hats." Replacing Versed with virtual reality therapy prior to his surgery meant the lingering drug effects doctors worry about were not present and demonstrated how VR can improve outcomes both before and after procedures.

Better Experiences Than Before

With the help of VR, doctors are now able to treat patients without fear or anxiety getting in the way. Patients can be taken to an entirely different setting which enables them to be unbothered by their surroundings. Surgeons can now focus more on the procedure and less about a patient's fears and anxiety. As this new technology is being implemented in medical centers and clinics, the results are truly astounding. The VR headset transforms a medical procedure into a new, exciting experience that makes them feel less stressed,



Gavin playing Bear Blast and relaxing prior to his surgery.

more calm and provides better and happier outcomes.

Quality patient care is the primary concern for doctors, and with the help of Virtual Reality, the care they provide is becoming more effective. Gavin is just one example of how this technology is being used to improve patient outcomes, as well as reduce the need for anxiety relieving pre-op medication.



Gavin being moved onto the operating bed in the OR.

surgery, at first, I was scared because I thought it was going to hurt. When I got to the hospital I saw Dr. Raven. He was wearing a blue shirt and he was nice. The nurse showed me the Virtual Reality. It was awesome! I saw red bears, blue bear, and bear with mustaches and hats. The game I played made me feel happy! I felt

Excerpt from a handwritten letter from Gavin retelling his surgery experience.

Note: Patient name has been changed to maintain confidentiality.