Landmark Study on Adolescent Bariatric Surgery Outcomes Shows Successful Results

Bariatric surgery has proven to be an effective option for adolescents struggling with obesity and associated health conditions, according to a new study led by the University of Miami Miller School of Medicine and collaborating institutions.

Nestor de la Cruz-Muñoz, M.D.

The study, titled “Long-Term Outcomes after Adolescent Bariatric Surgery,” addresses the dearth of data on how the surgery affects adolescents in the long term. It published online in the Journal of the American College of Surgeons this
First author Nestor de la Cruz-Muñoz, M.D., chief of bariatric surgery and professor of clinical surgery at the Miller School and collaborators at UTHealth Houston saw the need for research and follow-up data on adolescents who have undergone the procedure.

“For bariatric surgery in general, only about 1\% of potential patients get the surgery per year,” Dr. de la Cruz-Muñoz said. “Access to care is limited by lack of insurance access and education about the benefits of bariatric surgery for patients’ health. Ninety-eight percent of patients who could benefit each year from the surgery are not getting it, and those numbers are much worse for adolescents.”

Lack of Awareness of Health Benefits

Despite the benefits of the operation, the scarcity of long-term follow-up data on adolescents has made providers reluctant to recommend it and caused parents to be skeptical. In addition, several health insurance companies deny the procedure for adolescents. The work done by Dr. de la Cruz-Muñoz and other collaborators aims to break the stigma against the surgery by showing its long-term benefits.
“The current state of obesity in the U.S. is horrible and won’t improve if people are unaware of the health benefits these surgeries provide, especially in adolescents,” Dr. de la Cruz-Muñoz said. “Benefits of improving long-term cardiovascular risk parameters can decrease mortality 15, 20, 30 years down the road, and improve health in that same timeframe.”

The study first looked at a potential pool of more than 300 patients who got metabolic and bariatric surgery before they were 22. One hundred and thirty had their surgery more than 10 years ago. After getting permission from the Institutional Review Board, the team tracked down 96 former patients across the country, most of whom underwent gastric bypass surgery between 2002 and 2010. The patients’ starting weights had ranged from 241.5 to 324 lbs., with a median of 278.5 lbs.
Now mostly in their 30s, these 96 patients participated in the study through telehealth visits to assess their body weight, comorbidity status, social/physical function status, and long-term complications more than a decade after the surgery. Importantly, 85% of the participants were Latino or non-Hispanic Black — groups disproportionately impacted by obesity in the U.S. pediatric and adult populations.

**Long-Term Success**

Findings from the study showed that the bypass patients had a 31.3% total body weight loss in 14.2 average years after their procedure. Not only was the majority weight kept off over 76% of the patients, but other health risks improved. Hypertension, sleep apnea, gastroesophageal reflux disease, anxiety, and depression went down to 4%, and diabetes, hyperlipidemia, and asthma were reported at 100% remission in the follow-up. The median weight of the patients at the time of follow-up to range from 160 to 240 lbs., with an average of 195 lbs.

The study further shows that more than 90% of the patients have no regrets about having the operation, and are in fact doing better in their social lives because of it. Patients reported better physical and mental health outcomes from the surgery; 84 are employed, more than half are married, and a large majority of the women went on to successful pregnancy and childbirth.
Sarah Messiah, Ph.D., M.P.H.

“There are long-term benefits to completing bariatric surgery before the age of 22,” said Sarah Messiah, Ph.D., M.P.H., senior author of the study and professor and director of the Center for Pediatric Population Health at UTHealth School of Public Health in Dallas. “The durability of the positive health outcomes at these young ages hasn’t been well known this far out. It’s been a gap in understanding that this research has helped to fill.”

Dr. Messiah has been working with Dr. de la Cruz-Muñoz for 15 years on research examining outcomes of bariatric surgery for adolescents.

Because the surgery shows promising results that continue later in life, Dr. de la Cruz-Muñoz hopes the study will lead to an awakening in the medical community, especially for pediatricians to recommend the surgery for adolescents. The study also supports the American Academy of Pediatricians’ 2019 guidance for greater access to bariatric surgery for
teens with severe obesity.

“Nearly four million children in the U.S. are dealing with obesity, but 48% of providers are still not recommending bariatric surgery as a solution,” Dr. de la Cruz-Muñoz said. “Through this paper, we aim to provide recent data that shows what happens long term and its success. These findings aren’t from a best-case scenario, but from real-life outcomes. People can expect these successful results from bariatric surgery under any circumstance.”

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