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**CLEVELAND CLINIC STUDY SHOWS HIGH REMISSION RATES
OF DIABETIC KIDNEY DISEASE FIVE YEARS AFTER BARIATRIC SURGERY**

SAN DIEGO, CA – JUNE 20, 2012 – In many obese diabetic patients, one of the most dreaded complications of Type 2 diabetes can be put into remission or prevented entirely with bariatric surgery, according to a new study* from the Cleveland Clinic presented here at the 29th Annual Meeting of the American Society for Metabolic & Bariatric Surgery (ASMBS).

The study found that nearly 60 percent of obese patients with diabetic nephropathy, the leading cause of end-stage kidney disease, no longer had the condition five years after surgery. Additionally, only 25 percent of obese diabetics without nephropathy at the time of surgery eventually developed this complication. Researchers noted this incidence rate after surgery is about 50 percent less than what occurs in the non-surgically treated diabetes population. The five-year remission and improvement rates for Type 2 diabetes were 44 percent and 33 percent, respectively.

“When we started this study, we thought bariatric surgery may just halt the progression of diabetic nephropathy, instead over half of the patients who had diabetic nephropathy prior to undergoing bariatric surgery experienced remission. This is a remarkable finding that warrants greater consideration of bariatric surgery in this patient population,” said lead study author Helen M. Heneghan, MD, a bariatric surgery fellow at the Cleveland Clinic Bariatric and Metabolic Institute in Ohio.

About seven million Americans have diabetic kidney disease, which jumped 34 percent in the last two decades, despite a substantial increase in the use of medications to treat the disease. Diabetes is the most common cause of kidney disease, a condition that independently increases the risk of heart disease and death.¹

The study included 52 patients, mostly female, who suffered from obesity and Type 2 diabetes for almost nine years. They had an average body mass index (BMI) of 49 before undergoing bariatric surgery, which was primarily gastric bypass surgery. Nearly 40 percent had diabetic nephropathy prior to undergoing surgery, a complication of diabetes caused by uncontrolled blood sugar which, in severe cases, can require dialysis or lead to kidney failure. In the United States, diabetic nephropathy accounts for about 40 percent of new cases of end-stage renal disease.²

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“No medical therapy has been as effective in achieving an effect of this magnitude on diabetic nephropathy,” said study co-author Philip R. Schauer, MD, professor of surgery and director of the Cleveland Clinic Bariatric and Metabolic Institute. Dr. Schauer published a study earlier this year in the *New England Journal of Medicine* that showed bariatric surgery can put Type 2 diabetes into remission even before substantial weight loss occurs. In addition to remission or improvement of Type 2 diabetes and its complications in the current study, patients were able to maintain 50 percent excess weight loss after five years, and also achieved significant improvements in blood pressure and cholesterol levels.

According to the World Health Organization, 90 percent of people with Type 2 diabetes worldwide are obese or overweight.³ The federal government estimates about 10.7 percent (23.5 million) of people age 20 years or older in the United States have Type 2 diabetes.⁴ According to the study authors, given these striking figures, the importance of trying to control obesity and diabetes, and prevent diabetic complications, is even more apparent.

In addition to Dr. Heneghan and Dr. Schauer, study co-authors include Neil Orzech, MD, Kalman Bencsath, MD, Derrick Cetin, DO, and Stacy A. Brethauer, MD.

About Obesity and Metabolic and Bariatric Surgery

Obesity is one of the greatest public health and economic threats facing the United States.⁵ Approximately 72 million Americans are obese⁶ and, according to the ASMBS, about 18 million have morbid obesity. Obese individuals with a BMI greater than 30 have a 50 to 100 percent increased risk of premature death compared to healthy weight individuals as well as an increased risk of developing more than 40 obesity-related diseases and conditions including Type 2 diabetes, heart disease and cancer.^{7,8} The federal government estimated that in 2008, annual obesity-related health spending reached \$147 billion,⁹ double what it was a decade ago, and projects spending to rise to \$344 billion each year by 2018.¹⁰

Metabolic/bariatric surgery has been shown to be the most effective and long lasting treatment for morbid obesity and many related conditions and results in significant weight loss.^{11,12,13} In the United States, about 200,000 adults have metabolic/bariatric surgery each year.¹⁴ The Agency for Healthcare Research and Quality (AHRQ) reported significant improvements in the safety of metabolic/bariatric surgery due in large part to improved laparoscopic techniques.¹⁵ The risk of death is about 0.1 percent¹⁶ and the overall likelihood of major complications is about 4 percent.¹⁷

About the ASMBS

The ASMBS is the largest organization for bariatric surgeons in the world. It is a non-profit organization that works to advance the art and science of bariatric surgery and is committed to educating medical professionals and the lay public about bariatric surgery as an option for the treatment of morbid obesity, as well as the associated risks and benefits. It encourages its members to investigate and discover new advances in bariatric surgery, while maintaining a steady exchange of experiences and ideas that may lead to improved surgical outcomes for morbidly obese patients. For more information, visit www.asmb.org.

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***PL-116: Effects of Bariatric Surgery on Diabetic Nephropathy After 5 Years Follow-up**

Dr. Helen M. Heneghan; Dr. Philip R. Schauer; Neil Orzech, MD; Kalman Bencsath, MD; Derrick Cetin, DO; Stacy A. Brethauer, MD

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