

Surgical Cure for Type II Diabetes - Myth or reality!!

Bariatric Surgery or Obesity Surgery is an extremely effective option for sustained and significant weight loss. There are other multiple benefits of surgery on the body but the one effect, which is almost magical, is the effect on Type II Diabetes Mellitus. Nearly 70-100% patients undergoing bariatric surgery for weight loss are cured of diabetes. On an average, bariatric surgery causes cure in about 70% and improvement in the remaining patients.

There are several studies, which show that the blood sugars normalize long before any significant weight loss (1,2)This effect of surgery takes place early in the postoperative period and is not due to the weight loss in the initial period. It is

believed that various gut hormones play an important role in resolution of diabetes after bariatric surgery. The role of the bypass of foregut has been considered one of the important reasons for this.

Laparoscopic sleeve gastrectomy (LSG), a restrictive bariatric operation, may be used to induce weight loss in moderately obese diabetic patients. LSG is a simpler and safer operation than other bariatric operations like gastric bypass and duodenal switch (BPD-DS). LSG has a favorable impact on Type II Diabetes. Our own experience with this procedure shows that more than 80% patients are cured of diabetes. Han et al reported marked improvement in the comorbidities, which were present in 50 out of 60 patients who underwent LSG. Diabetes resolved in all the 8 diabetic patients, hypertension resolved in 92.9% and improved in the remaining patients.

Impressive improvement in diabetic status of patients undergoing bariatric surgery has stimulated interest in surgery as a potential cure for type 2 diabetes (NIDDM). India is the diabetic capital of the world. A lot of these patients are obese. A safe surgical procedure with a very low rate of complications is required if surgery for cure of diabetes is considered. At present metabolic surgery that is surgery for cure of Type II Diabetes mellitus can be considered for moderately obese diabetics in well- designed studies. Only after the safety of these procedures has been proved beyond doubt, should they be offered to non-obese diabetics. Laparoscopic Sleeve gastrectomy is a reasonable option for metabolic surgery. More complex procedures have a higher rate of complications and should be avoided.

References: 1 Schauer PR et al. Effect of laparoscopic roux-en Y gastric bypass on type 2 diabetes mellitus. Ann Surg. 2003 t;238(4):467,84; discussion 84-5.

2 Pories WJ et al. Who would have thought it? an operation proves to be the most effective therapy for adult-onset diabetes ellitus. Ann Surg. 1995 Sep;222(3):339,50; discussion 350-2.