
Gastric bypass in the management of morbid obesity

An Essay
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Abstract

Total mesorectal excision with pelvic autonomic nerve preservation (TME-ANP) has been reported to be an optimal surgery for rectal cancer. It minimizes local recurrence and sexual and urinary dysfunction. There is a device (CaverMapÆ Device) that has the potential ability to enhance pelvic autonomic nerve identification and preservation during rectal surgery. Erectile dysfunction after rectal excision for rectal cancer is completely reversed or satisfactorily improved in 79 percent of patients after use of sildenafil. This means that these patients have an excellent chance of improvement in their erectile function with sildenafil.

Obesity is a serious disease that carries substantial morbidity and mortality and has mixed genetic and environmental etiologies. Obesity is defined as the accumulation of excess body fat that leads to pathology.

The term "morbid obesity" is used if Body Mass Index is more than 40 Kg/m².

Severe obesity is associated with a large number of problems that give rise to the term morbid obesity. They include coronary artery disease, hypertension, impaired cardiac ventricular function, adult-onset diabetes mellitus, obesity hypoventilation and sleep apnea syndromes.

Although medical management of morbid obesity patients made some progress, However, a persistent weight reduction can hardly be achieved.

Surgical treatment of morbid obesity is gaining popularity, and there is obviously increased interest and acceptance of bariatric surgery and it is the way to achieve stable reduction of body weight in morbidly obese patients.

The operations currently in use for management of morbid obesity involve gastric restriction with or without intestinal mal-absorption. Gastric restrictive procedures include laparoscopic vertical banded gastroplasty (LVBG) and laparoscopic adjustable gastric banding (LAGB).

Malabsorptive procedure include biliopancreatic diversion (BPD), biliopancreatic diversion with duodenal switch (BPD-DS). Roux-en-Y gastric bypass has features of both restriction and malabsorption.

Recently, the Roux-en-Y gastric bypass procedure has been successfully performed as a laparoscopic procedure with a safety and efficacy profile comparable to that achieved with open procedure.

References:

- 1- Brethauer SA: Laparoscopic gastric Bypass. In: Mastery of Surgery. Fischer JE, Bland KI, Callery MP, Clagett GP, Jones DB, LoGerfo FW, Seeger JM (Editors); Philadelphia: Lippincott Williams and Wilkins (Publishers); 5th edn, 2007; p.963 -1004.
- 2- De Maria EJ, Maher JW: Vertical Banded Gastroplasty. In: Mastery of Surgery. Fischer JE, Bland KI, Callery MP, Clagett GP, Jones DB, LoGerfo FW, Seeger JM (Editors); Philadelphia: Lippincott Williams and Wilkins (Publishers); 5th edn, 2007; p.963 -1004.
- 3- Humadi S, Welbourn R: Bariatric surgery: Rationale development and current status. In: Recent advances in surgery. Johnson CD, Taylor I (Editors); 31st edn. 2008; p.59-70.
- 4- Kushner RF: Evaluation and management of obesity. In: Harrison's Internal Medicine. Fauci AS, Kasper DL, Longo DL, Braunwald E, Hauser SL, Jameson JL, Loscalzo J (Editors); New York: McGraw Hill (Publishers); 20th edn. 2008; p.462-472.
- 5- Jensen MD: Obesity. In: Cecil Medicine. Goldman L, Ausiello D (Editors); New York: Elsevier (Publishers); 23th edn. 2008; p.1643-1652.
- 6- Jacobs DO, Robinson MK: Morbid obesity and operations for morbid obesity. In: Maingot's abdominal operations. Zinner MJ, Ashley SW (Editors); New York: McGraw Hill (Publishers); 11th edn. 2007; p.455-478.
- 7- Schirmer BD: Morbid Obesity. In: Sabiston textbook of surgery. Townsend CM, Beauchamp RD, Evers BM, Mattox KL (Editors); Philadelphia: Elsevier (Publishers); 18th edn. 2008; p.357-399.