EFFICACY OF LAPAROSCOPIC ROUX EN Y GASTRIC BYPASS IN THE MANAGEMNT OF MORBIDLY OBESE PATIENTS

THESIS

Submitted For Partial Fulfilment of M.D Degree
in General Surgery

By
Mohamed Aly Lasheen
(M.B. B.C.H,Ms C.G.S)

Supervised By
Prof. Dr. Alaa Abbas Sabry Moustafa
Professor of General Surgery
Faculty of Medicine, Ain Shams University

Prof. Dr. Ayman Abdallah Abdrabu
Professor of General Surgery
Faculty of Medicine, Ain Shams University

Dr. Hisham Maged Abd Elaal
Assistant professor of General Surgery
Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University
2009

ACKNOWLEDGMENT

I would like to express my deepest gratitude and appreciation to Prof. Dr./ Alaa abaas sabry , professor of general surgery, Faculty of Medicine, Ain Shams University, for his great supervision and encouragement and it was great honor to finish this work under his supervision.

I am deeply indebted to Dr./ Ayman Abdallah Abdrabu, professor of general surgery, Faculty of Medicine, Ain Shams University for his guidance during the preparation of this essay and for sponsoring this work, the extensive time and tremendous effort to offer every possible help to finish this work.

Particular appreciation to Dr./ Hisham Maged Abd Elaal Lecturer of general surgery, Faculty of Medicine, Ain Shams University, for his guidance, continuous advice and for his valuable discussion during the preparation of this essay.

Index

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES

Index of charts

Introduction

Obesity has become a major health problem in many countries, because of its high prevalence and causal relationship with serious medical and psychological complications.

(Sugarman, 2001)

The clinical definition of obesity is usually expressed in terms of body mass index (BMI), also called Quttet's index. Which is derived by dividing one's weight by the square of one's height. BMI = Kg/m^2.

In 1997, the world health organization clearly defined the various classifications of over weight and obesity. Overweight is defined as BMI greater than 25 and obesity as BMI greater than 30. this classification was subsequently adopted by the national institute of health and now become a worldwide standard.

(Pisunyer, 1998)

M.D The Qualifier "morbid" is applied to the condition when the amount of overweight I s495 Kg (110/b) or ore or when the patient is more than twice

ideal weight. 49.5 Kg standardized by 110/b for a 150 cm individual and considered as base line and adding 2 Kg (5/b) for each 2.5 cm (1 inch) over 150 cm (5 Ft)

(Menguy, 1990)

Health consequences are categorised as being the result of either increased A large number of medical conditions have been associated fat mass (osteoarthritis, obstructive sleep apnea, social stigma) or increased number of fat cells (diabetes, cancer, cardiovascular disease, non-alcoholic fatty liver**.**

(Bray GA ,2004)

Mortality is increased in obesity, with a BMI of over 32 being associated with a doubled risk of death.[1] There are alterations in the body's response to insulin (insulin resistance), a proinflammatory state and an increased tendency to thrombosis (prothrombotic state**).**

(Manson JE, et al 1995)

Disease associations may be dependent or independent of the distribution of adipose tissue.

Central obesity (male-type or waist-predominant obesity, characterised by a high waist-hip ratio), is an important risk factor for the metabolic syndrome, the clustering of a number of diseases and risk factors that heavily predispose for cardiovascular disease. These are diabetes mellitus type 2, high blood pressure, high blood cholesterol, and triglyceride levels (combined hyperlipidemia).

(Grundy SM ,2004)

Apart from the metabolic syndrome, obesity is also correlated with a variety of other complications. For some of these complaints, it has not been clearly established to what extent they are caused directly by obesity itself, or have some other cause (such as limited exercise) that causes obesity as well.

- ***Cardiovascular***: congestive heart failure, enlarged heart and its associated arrhythmias and dizziness, varicose veins, and pulmonary embolism
- ***Endocrine***: polycystic ovarian syndrome (PCOS),

menstrual disorders, and infertility

(van der Steeg J , et al 2008)

- ***Gastrointestinal***: gastroesophageal reflux disease (GERD), fatty liver disease, cholelithiasis (gallstones), hernia, and colorectal cancer

Renal and genitourinary: erectile dysfunction,

(Esposito K .et al 2004)

- urinary incontinence, chronic renal failure,
- hypogonadism (male), breast cancer (female), uterine cancer (female), stillbirth
- Integument (skin and appendages): stretch marks, acanthosis nigricans, lymphedema, cellulitis, carbuncles, intertrigo
- ***Musculoskeletal***: hyperuricemia (which predisposes to gout), immobility, osteoarthritis, low back pain
- ***Neurologic***: stroke, meralgia paresthetica, headache, carpal tunnel syndrome, dementia, idiopathic intracranial hypertension

- ***Respiratory***: obstructive sleep apnea, obesity hypoventilation syndrome, asthma

Psychological: Depression, low self esteem, body dysmorphic disorder, social stigmatization

(Whitmer RA,et al 2005)

Reduction of body weight can be achieved through conservative management including dietary modification, exercise programs, behavioral modification, hypnotherapy and appetite suppressants. These measures, however, are rarely successful in patients with morbid obesity. This has led to the development of a number of antiobesity operations .

(Evans et al., 2000)

Medical treatment only achieve a 10% weight loss in responding patient, however, more than 30% following bariatric surgery. Actually, surgical treatment of morbid obesity is gaining in popularity, and there is obviously increased interest and acceptance of bariatric surgery and it's the way to

achieve stable reduction of body weight in morbidly obese patients.

(Sugarman, 2001)

Since non-operative therapy has been unsatisfactory, it seems logical to proceed with any sort of surgical operations that would be safe, effective in achieving permanent weight reduction, and reversible, if necessary. Although the procedure of choice is still a matter of debate, gastric restriction procedures are known to produce good results in the treatment of severe eobesity.

(Mason, et al., 1992)

Intestinal bypass was the first surgical treatment to control severe obesity by inducing malabsorption .

(DeWind and Payne)

Good weight loss was achieved by many patients, however, long-term follow-up revealed severe and sometimes lethal complications.

(Kuzmak, 1991)

In 1966, Masson introduced gastric bypass (GB) 6, an operation combining gastric restriction and malabsorption. In gastric restriction operation, the surgeon creates a small gastric pouch in the fundus and a small stoma, which connects the pouch with the gastro-intestinal tract. The small pouch and stoma restrict food intake. This restriction both causes and allows the maintenance of weight loss .

(Masson, 1967)

Etiology of morbid obesity

Obesity has become a major health problem in many countries, because of its high prevalence and causal relationship with serious medical and psychological complications.

(Sugarman, 2001)

The clinical definition of obesity is usually expressed in terms of body mass index (BMI), also called Quttet's index. Which is derived by dividing one's weight by the square of one's height.

BMI = Kg/m^2.

In 1997, the world health organization clearly defined the various classifications of over weight and obesity. Overweight is defined as BMI greater than 25 and obesity as BMI greater than 30. this classification was subsequently adopted by the national institute of health and now become a worldwide standard.

(Pisunyer, 1998)

M.D The Qualifier "morbid" is applied to the condition when the amount of overweight I s495 Kg (110/b) or ore or when the patient is more than twice ideal weight. 49.5 Kg standardized by 110/b for a 150 cm individual and considered as base line and adding 2 Kg (5/b) for each 2.5 cm (1 inch) over 150 cm (5 Ft)

(Menguy, 1990)

Health consequences are categorized as being the result of either increased a large number of medical conditions have been