

INTRODUCTION

Obesity is a major health and socioeconomic problem all over the world and its prevalence continues to rise in many industrialized and underdeveloped countries. It is estimated that there are more than 500 million overweight and 250 million obese adults in the world (**Klein, 2001**).

Obesity is defined as a disease of increased Body Mass Index more than 30 kg/m^2 and it is considered morbid obesity when Body Mass Index exceeds 40 kg/m^2 (Body Mass Index is defined as weight in kilograms divided by height in meters squared) (**Frier, 1999**).

Comorbid diseases or diseases associated with obesity include hypertension, atherosclerosis and other cardiovascular diseases. Dyslipidemia, gall stones, diabetes mellitus and hypercortisolism are comorbidities of obesity. It is also associated with respiratory diseases as asthma and sleepapnea. Degenerative joint diseases and diseases related to increased intra abdominal pressure as hernia, reflux oesophagitis and varicose veins are other diseases associate morbid obesity (**pi-sunyer, 2000**). Morbid obesity also is associated with certain cancers as breast, endometrium, prostate, colon, gall baldder, kidney and oesophagus (**kral, 2001**). Management of obesity results in improvement of these associated diseases whatever its pathophysiological changes, (**Evan and scott, 2001**).

Aetiology of obesity is multifactorial including dietary causes, physical inactivity, psychological causes, Also medication and neuroendocrinal causes may be present but there is evidence of a significant gene-environment interaction at all cellular levels from

initiation, transcription and expression hence the difficulty of medical treatment. **(Thomas et al, 1998).**

Medical management of obesity including diet therapy, behaviour modification and pharmacotherapy are accompanied by several side effects as insomnia, headache and gastrointestinal side effects. Recently cardiac valve damage has been reported so surgical treatment is often indicated **(klein, 2001).**

Intragastric balloons have been used in the past in an attempt to induce early satiety which, with effective exercise programme and dietary modification, results in weight loss which theoretically should be maintained with behaviour modification. The bioenteric intragastric balloon is a silicone elastic balloon with a self-sealing radio- opaque valve which is placed in the stomach endoscopically and inflated under direct vision is used now but with some complication as vomiting, abdominal pain, diarrhea and deflation and displacement causing acute intestinal obstruction **(Dewaele et al, 2000).**

Surgical treatment is indicated when the patient fulfill the following criteria: Body Mass Index $> 40 \text{ kg/m}^2$ or Body Mass Index $> 35 \text{ kg/m}^2$ with medical comorbidities , failure of non surgical attempts to reduce weight , absence of endocrine disorders that can cause massive obesity, psychological stability , absence of alcohol and drug abuse and Commitment to postoperative follow-up **(Brolin, 2001).**

Surgical treatment includes : 1) Operations aiming to induce a negative energy balance through producing malabsorption like state; jejunoileal bypass, biliopancreatic diversion and duodenal switch operation **(Marceau et al, 2001).** 2) Operations aiming to decrease food intake ; intra gastric balloon , gastric bypass , gastroplasty and gastric

banding (**Jung and Cuschieri, 2000**). Surgical treatment has some complications as anastomotic leak, bowel obstruction and postoperative gastrointestinal haemorrhage (**Ninh et al, 2001**).

The development of less invasive bariatric operations using laparoscopic technique is a major advance as it improves outcomes by reducing perioperative morbidity, recovery and in some cases even late complications. Laparoscopic approaches to bariatric operations, including laparoscopic vertical banded gastroplasty, adjustable silastic gastric banding and laparoscopic gastric bypass are in current use with some complications (**Higa et al, 2000**). These complications of laparoscopic procedures as increased rate of anastomotic leak, post-operative haemorrhage from the cut gastric staple line diminished as laparoscopic experience improves. (**Ren et al, 2000**).

Aim Of The Essay

The aim of the essay is to throw some light on the recent surgical modalities performed for morbid obesity with emphasis on patient selection and post operative complication and mortality.