# Introduction

Obesity is a chronic genetically related disease of excessive fat storage that is associated with a significant impairment of health and can be life threatening **( Jamie and Mark , 2010).**

The incidence and prevalence of Obesity is increasing worldwide with more than 300 million people estimated to be obese . In the case of obesity (BMI 45 kg/m2) in young adulthood, life expectancy is reduced by 13 years in men and 8 years in women **( Helge and Thomas , 2010 ).**

Either increased body weight, as expressed in the body mass index [BW (kg)/Ht (m)2], or waist circumference can be used to assess the degree of obesity, and both indices have been rising steadily as the epidemic of obesity has spread over the past 20 years **( Bray, 2007).**

Adiposity correlates with BMI**,** BMI provides the most useful measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered as a rough guide because it may not correspond to the same degree of fatness in different individuals **(WHO , 2006).**

The pathology of obesity can best be understood as either an enlargement of fat cells or an increased number of them . These large fat cells release more fatty acids and a variety of cytokines that can provide a basis for understanding how obesity produces insulin resistance and changes in the inflammatory, thrombotic, and coagulation systems **( Spalding et al,2008).**

Lifestyle modification, including diet, exercise and behavioural modification, are still the cornerstone of obesity treatment; however, these modifications result in modest weight loss. Even patients who success of

weight loss have actual difficulty maintaining long-term weight reduction of more than a few percent of their body weight and they regain most of lost weight again **( Lau et al., 2006).**

Antiobesity drug therapy leads to 3–5 kg of additional weight loss, but drugs are expensive and poorly tolerated, and persistence with therapy is less than 2% at 2 years. In contrast with lifestyle modification and drug therapy, bariatric surgery results in 33% weight reduction in the first several years. Surgery is currently indicated for patients with severe obesity or medically complicated moderate obesity who have had unsuccessful attempts at lifestyle modification **( Sjostrom et al.,2007).**

Dietary treatment and physical activity are fundamental to the management of obesity. Compliance with the diet is the major problem, especially during the phase of weight maintenance after the excess weight loss has been lost **(Quilliot et al., 2010).**

Many individuals can lose weight successfully through dietary manipulation but the incidence of recidivism in morbidly obese approach 95%. Bariatric surgery is currently and apparantly the only treatment associated with sufficient and sustained weight loss **(Suter, 2005).**

The most commonly used surgical procedures are:

- Gastric restriction procedures e.g. historical vertical banded gastroplasty (VBG) , Sleeve gastrectomy and gastric banding(GB) **(Doherty,2001).**

- Combined gastric restriction and malabsorption e.g. Roux -en-Y gastric bypass(RYGB) **(Brolin et al., 2001).**

- Selective maldigestion and malabsorption with partial gastric resection e.g. biliopancreatic diversion with or without duodenal switch **(Marceau et al,2001).**

Minimal invasive techniques have evolved and essentially have eliminated the high incidence of postoperative wound complications and incisional hernias frequently seen after open procedures **(Demaria and Jamal , 2005).**

The rising popularity of bariatric surgery over the past several years is attributable in part to the development of laparoscopic bariatric surgery.The laprascopic approach to bariatric surgery offer a minimally invasive option that reduces the physiologic stress and provides clinical benefits as compared with the open approach **(Cottam, 2005).**