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Editorial

The Newer Horizons in Bariatric Surgery

most performed bariatric /metabolic procedure in the world. However, sleeve gastrectomy showed a steep increase from 2003 to 2013 thus, becoming second most performed bariatric/metabolic procedure in the world. SG is now considered common procedure performed to the tune of 50% in Asia. Whereas LAGB showed a peak in 2008 and then a significant decrease thereafter. LAGB enjoyed a good reputation at the beginning of century being commonly performed bariatric procedure worldwide. The reasons being good clinical results, less complications, technical ease and performed on an outpatient basis. Unfortunately LAGB could not give satisfying results as it could not achieve and maintain weight loss, and increased frequency of follow ups and poor long term results [3]. Moreover higher reoperation rates secondary to long term complication due to slippage, pouch dilatation, dysphagia and erosions contributed to its decline while as LAGB was decreasing in its popularity, SG was increasing in its reputation worldwide due to its technical ease, lesser complication and reoperation rates [4].

There has been a great advance in devising newer and newer surgical procedures over the past two decades. Many laparoscopic and endoscopic procedures are being practiced to handle the disease of obesity. The MGB developed by DR. ROBERT RUTLEDGE in 1997 is gaining momentum as a more cost effective procedure and a promising modification to RYGB which is considered the gold standard bariatric surgical procedure [5]. This operation creates long vertical gastric pouch along the lesser curve starting at the antrum distal to crow's feet supplanted with billroth type 2 loop gastrojejunostomy performed. It includes one anastomosis, shorter operative time, shorter learning curve and ease of reversibility. About 1.8 percent of the bariatric procedures are MGB which is expected to rise in the next few years. The weight loss is found better with MGB than RYGB; however there is higher incidence of anaemia and diarrhoea with MGB than RYGB due to long bilio pancreatic limb [6].

The last few years have shown good results with the development of endoscopic techniques for the treatment of obesity and Metabolic disorders. These endoscopic procedures are in trials and serve as a potential bridge to navigate the

Editorial

Weight is one of the very important parameters of good health. Obesity is now a recognized disease, considered to be a global epidemic. It is increasing in prevalence in adults, adolescents and children. A low level of physical activity, increased use of energy rich, and nutrient poor foods with high levels of sugar and saturated fat has led to increased rates of obesity in different areas like America, United Kingdom, Europe and the Middle East. The prevalence of obesity among adults rose from 14.9% to 24.9% between 1993 and 2013. The cost of obesity and its commorbidities have upsurged to three billion Euros per year. It is predicted that by 2050; 60% of adult men, 50% of adult women and 25 percent of children will be engulfed by this disease of obesity. It is beyond doubt to express that morbidly obese people have high risk of physical and metabolic commorbidities that impair their health and increase motartility. They have high risk of hypetension, hyper cholesterolemia and diabetes mellitus compared with the normal weight individuals. It is estimated that the annual NHS budget for treating type 2 diabetes mellitus will be doubled by the next 25 years. The obese subjects have a reduced life expectancy by an average of three years. It is also true that subjects having BMI over 40 have reduced life expectancy by 8 to 10 years. This reflects the burden; the healthcare system has to suffice in the near future [1].

Currently U.S, Canada, Europe and Middle East are emerging with increasing numbers of obesity related surgical procedures. The most common procedure was laparoscopic roux-en-y gastric bypass (RYGB=45%) followed by laparoscopic sleeve gastrectomy (SG=37%) and laparoscopic adjustable gastric banding (LAGB=10%) in the world [2]. In 2013, there has been a decrease LAGB as a first choice procedure; roux-en-y gastric bypass also showed a decrease but still represents the

gap between medical therapy and surgery. They are less invasive, lower cost and can be used as primary bariatric surgical procedures or as a revisional procedure after bariatric surgery. The primary endoscopic bariatric therapies include restrictive procedure done by space occupying or suturing devices. The malabsorptive performed by endoluminal bypasses and injection of substances for example botulinum toxin. The various endoluminal restrictive procedures remodel the stomach via suturing, stapling to reduce the gastric volume to induce weight loss these include the endocinch suturing system, trans oral gastroplasty system(TOGA) and the primary obesity surgery endoluminal device(POSE). The space occupying devices like intragastric balloon made of silicon resistant to gastric acid has a smooth surface to avoid mucosal erosions, filled with isotonic saline and a radio opaque self-sealing valve that allows to localize with simple radiations. It induces early satiety fills the stomach, creates feeling of fullness and slows gastric emptying during the first three months and can be kept for maximum 6 months [7]. The mal absorptive techniques are also practiced which are done by endoscopic ally and offer a duodenal jejunum bypass. The endoscopic ally implanted devices have been developed to reproduce this effect. The endo barrier gastrointestinal liner made of nickel titanium implant attached to 60cm polymer impermeable sleeve mimics a duodeno jejunum bypass. This device is open at both ends to allow the food to pass. It creates a barrier for absorption and delays the mixing of food with biliary pancreatic secretions. This device is endoscopic ally placed with fluoroscopic guidance under GA anchored to the duodenal bulb 5mm distal to the pylorus. It is removed endoscopic ally

under GA. The liner is kept for duration of 12 months [8]. The future understanding of various mechanisms leading to obesity focuses on gut hormones and gut bacteria.

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