Abstracts - Oral Presentation

A08. Outcomes following Reoperative Bariatric Surgery following Laparoscopic Sleeve Gastrectomy at a tertiary care centre

Authors: *Sandeep Aggarwal, Amardeep Kumar, Vitish Singla, Kaustubh Gaur* | India

Objectives
Amidst the pandemic of obesity, the number of primary as well as revision bariatric surgeries is on the rise. Hereby, we present outcomes following revision bariatric surgery at a tertiary care center.

Methods
Prospectively collected data of all patients undergoing revision bariatric surgery from 2010 until 2021 were analysed retrospectively. Weight loss, resolution of comorbidities, and complications following revision surgery were evaluated.

Results
Twenty-six patients were included in the study. The primary procedure performed was laparoscopic sleeve gastrectomy in all cases. Nine patients underwent RYGB (one banded RYGB) and 14 underwent OAGB (three-banded OAGB). Three patients underwent resleeve. The mean BMI before revision surgery was 42.7(9.8). It was 32.6(5.7) kg/m2 and 33.0(6.1) kg/m2 at 1 and 3 years respectively. Age and pre-revision surgery excess weight correlated with weight loss (r= -0.79 and r=0.99 respectively). Symptomatic reflux developed in one patient each following resleeve and banded RYGB. One patient each developed band erosion with gastro-gastric fistula and band slippage requiring reoperation. Postoperative bleeding occurred in two patients with one of them requiring an endoscopic clip application. One of the patients who underwent conversion to OAGB expired in the postoperative period due to sepsis related multiorgan dysfunction. The cause of sepsis was unclear as there was no evidence of leak or obstruction on CT scan.

Conclusion
Revision bariatric surgery has acceptable weight loss and low complication rates. Banded bypass procedures might have higher complication rates when performed as a part of revision surgery.

A10. Obesity services: Barriers and solutions during the COVID-19 pandemic

Authors: *Guy Holt, David Hughes* | United Kingdom

Objectives
To investigate and find consensus regarding the existing barriers to accessing obesity services in the UK and what best clinical practice solutions have been adopted during the COVID-19 pandemic.

Methods
Two separate studies were conducted using semi-structured interviewing and Delphi survey to seek consensus opinion of an expert panel. The interviews were conducted face to face or virtually and

transcribed to collate statements of opinion and experience. These formed the basis of multiple questionnaire rounds to obtain agreement and consensus of the expert panel. Participants included both healthcare professionals (HCPs) and patients.

Results
A total of 51 participants were recruited over both studies from various centres across the UK. This included pre and post bariatric surgery patients, dietitians, nurses, psychologists, physicians and surgeons.

Patients feel that the main barriers include negative perceptions of obesity/bariatric surgery, low mood/depression, obesity not being considered as a serious condition and lack of primary care awareness of obesity services. Whereas HCPs highlighted being housebound, disproportionate service commissioning and negative HCP perceptions on bariatric surgery are also barriers.

The best clinical practice solutions during the pandemic were grouped into outpatient management, preoperative (bariatric surgery) management and Team/individual working patterns. Responses included virtual communication as being default method of communication, face to face contact only in specific circumstances, use of text messages, emails, videos and other resources, hybrid MDT meetings, encouraging patients to self-monitor, option of home-working and short online webinars for patient education

Conclusion
Awareness of these barriers, as well as having obesity advocates in the commissioning process is key, along with the education of HCPs to combat obesity stigma. The lack of uniformity of services nationally also needs to be addressed. Services should embrace new ways of working and adapt clinical practice heading into the 'new normal' after the COVID-19 pandemic.

A13. A nationwide population-based cohort study on efficacy and safety of bariatric surgery in young adults versus adults

Authors: *Kelly G. H. van de Pas, Aliyar Esfandiyari Noushi, Loes Janssen, Anita C.E. Vreugdenhil, Wouter K. G. Leclercq, François M.H. van Dielen* | Netherlands

1. Department of Surgery, Máxima Medical Center, Veldhoven, The Netherlands
2. Department of Paediatrics, Maastricht University Medical Center, Maastricht, The Netherlands
3. NUTRIM School of Nutrition and Translational Research in Metabolism, Maastricht University, Maastricht, The Netherlands

Objectives
Bariatric surgery has proven to be the most effective treatment for severe obesity in adults and has shown promising results in young adults. However, due to concerns regarding efficacy, and short- and long-term complications the utilization of bariatric surgery in young adults lags behind that of adults. Therefore, this study aimed to compare weight loss outcomes between young adults and adults who underwent a Roux-en-Y Gastric Bypass (RYGB) or sleeve gastrectomy (SG).

Methods

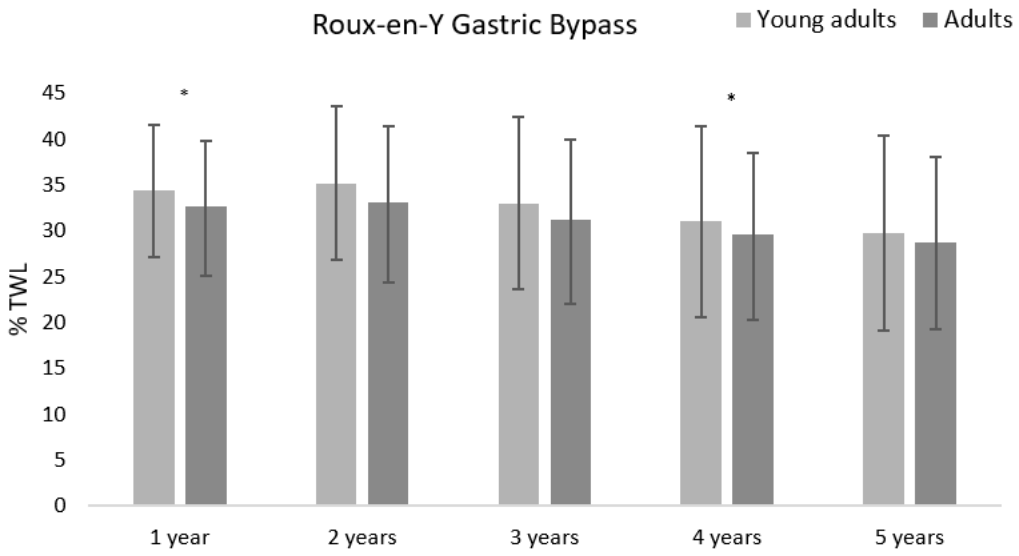
A nationwide population-based cohort study utilizing data from the Dutch Audit Treatment of Obesity (DATO). Young adults (aged 18-25) and adults (aged 35-55) who underwent primary RYGB or SG from 2015 to 2020 were included. Primary outcome was percentage total weight loss (%TWL) until five years postoperatively. Secondary outcomes were incidence of complications and regression of obesity related comorbidities.

Results

A total of 2,822 (10.3%) young adults and 24,497 (89.7%) adults were included. Young adults more often received a SG (45.8% versus 22.9%; p<0.001) and had a higher preoperative BMI compared to adults (44.4±4.9 versus 42.8±5.2; p<0.001). Young adults who underwent RYGB showed superior percentage TWL compared to adults until four years postoperatively (Figure 1a). Young adults who underwent SG revealed superior percentage TWL until five years postoperatively (Figure 1b). Postoperative complications ≤ 30 days were more prevalent among adults, 5.3% versus 3.5% (p<0.001). No differences were found in the long term complications. Young adults revealed more curation or improvement of hypertension, dyslipidemia and musculoskeletal pain.

Conclusion

Bariatric surgery appeared to be safe and effective in young adults. Compared to adults, superior weight loss and improvement of obesity related comorbidities were found in the short- and midterm.



N. young adults	1,529	813	452	280	160
Successful weight loss young adults[1]	1,487 (97.3%)	776 (95.4%)	404 (89.4%)	238 (85.0%)	134 (83.8%)
N. adults	18,890	11,927	7,622	4,717	2,788
Successful weight loss adults[1]	18,143 (96.0%)	11,179 (93.7%)	6,849 (89.9%)	4,048 (85.8%)	2,310 (82.9%)
P value[2]	0.018*	0.048*	0.744	0.704	0.770

1a

N. young adults	1,293	709	423	230	88
Successful weight loss young adults[1]	1,188 (91.9%)	626 (88.3%)	343 (81.1%)	173 (75.2%)	63 (71.6%)
N. adults	5,607	3,516	2,221	1,294	636
Successful weight loss adults[1]	4,948 (88.2%)	2,886 (82.1%)	1,640 (73.8%)	920 (71.1%)	407 (64.0%)
P value[2]	<0.001*	<0.001*	0.002*	0.201	0.162

1b

Figure 1a and 1b. Percentage TWL and successful weight loss between young adults and adults who underwent a primary RYGB or SG.
Data presented as mean (±SD) and n (%). * *p* value is below the threshold of ≤0.05
RYGB = Roux-en-Y gastric bypass, SG = sleeve gastrectomy, TWL = total weight loss, N = number
[1] Defined as ≥ 20% TWL
[2] *P* value of successful weight loss between young adults and adults

A17. Revisional bariatric surgery following Roux en Y gastric bypass: a systematic review

Authors: *James Butterworth, Smith C, Chang A, Ramar S* | United Kingdom

Introduction:
Roux-en-Y gastric bypass is often considered the gold standard procedure for morbid obesity. However, some patients experience weight regain after the initial bypass surgery and require revisional interventions. Only one systematic review has attempted to analyse the best revisional surgery following failed Roux-en-Y bypass, however little information was provided regarding the methodology or quality of included studies.

Methods:
504 articles were identified on PubMed, Medline and Embase search. Inclusion criteria: Prospective, retrospective series and clinical trials involving revisional bariatric surgery for failed Roux en Y gastric bypass. Exclusion criteria included review articles, case reports, and non-english language publications.

Results:
27 studies (n=862) were selected for inclusion consisting of 27 retrospective studies, 4 prospective studies and 1 Randomised Controlled Trial (RCT). Interventions for failed Roux en Y gastric bypass included laparoscopic revision (LR) of the gastrojenunal (GJ) anastomosis (n=311), laparoscopic adjustable gastric band (AGB) application to the GJ (n=150), endoscopic re-sizing of GJ pouch (ER) (n=345), and lapaoroscopic limb distalization (LD) (n=56). 12 month mean excess weight loss (EWL) was greatest in patients receiving LD (59.1%), followed by LR (46.2%), AGB (33.6%) and ER (11.7%). Overall mean complication rate was highest patients receiving AGB (18.8%), followed by LD (13.7%), LR (11.9%), and finally ER (8.2%). Due the heterogeneity of the data a formal meta-analysis was not performed.

Conclusion:
LD has demonstrated superior weight loss at 12 months in comparison to other surgical and endoscopic interventions, however this is limited by its high overall complication rate. Endoscopic re-sizing has a good safety profile however limited efficacy compared to surgical interventions. LR shows most promise with good 12 month EWL and a low overall complication rate. Carefully designed prospective studies with long-term follow-up are required to identify the optimal revisional procedure for patients with failed Roux en Y gastric bypass.

A18. Marginal Ulcers following gastric bypass in in bariatric surgery: a systematic review and practical guide to clinical practice

Authors: *James Butterworth, Smith C, Ftaieh F, Ramar S, Chang A* | United Kingdom

1. Kings College London NHS Trust, London. UK

Introduction

Laparoscopic Roux-en-Y gastric bypass (LRYGB) is the gold standard in bariatric surgery. A long-term complication can be marginal ulceration (MU) at the gastrojejunostomy. Although optimal management has been subject to debate within the bariatric community, there is no comprehensive review of this area. Our objective was to systematically review the literature relating to MU following LRYGB in order to compare different management options and their associated outcomes.

Methods:

Medline, Embase and google scholar were searched using relevant search terms up until August 2022. Inclusion criteria: trials, observational studies, studies, case series. Exclusion criteria: case reports, non-English articles, systematic reviews, review articles, non-relevant to study question.

Results:

Of 458 initial studies initially identified, 31 met inclusion criteria including 28 retrospective studies and 3 prospective studies. 8 of the included studies focussed on perforation of MU following RYGB. Out of a total of 422501 patients having bypasses, 4296 suffered from an MU, giving a prevalence of 6.8%. 330 patients had a perforated MU and 4066 had no perforation. Baseline demographics of this cohort: mean age 43.7 years; proportion of females 82.25%, and; median BMI 46.1 (5.9-10.7). 6 studies (n=77) treated patients with PPI and sucralfate, 2 studies (n=161) utilised a PPI and endoscopy, 9 (n=3035) involved laparoscopic revision of the gastro-jejunal anastomosis and 2 (n=63) performed laparoscopic repair of the perforated MU. Complications in the laparoscopic revision group included recurrence of MU (19.8%); gastro-gastric fistula (12.9%), and 30-day mortality (5.8%). Different complications were identified in the laparoscopic repair of MU cohort including: Upper GI bleeding (12.2%); anastomotic stricture (3.4%), and; 30-day mortality (2.27%). There were no complications in association with non-operative management strategies.

Conclusion:

Following this systematic review of published literature we have developed a framework to guide surgeons on management of MU following RYGB including non-operative, endoscopic and operative management.

A19. Intestinal failure in post bariatric surgery patients needing total parenteral nutrition

Authors: *Georgios Geropoulos, Simon Gabe, Maja Kopczynska Maja, Simon Lal, Chetan Parmar* | United Kingdom

1. Trainee, Department of General and Upper GI Surgery, Victoria Hospital Kirkcaldy, Kirkcaldy, UK.
2. Consultant Gastroenterologist, London North West University, UK
3. Consultant Gastroenterologist, Salford Royal & University of Manchester, UK
4. Trainee, Department of Gastroenterology, Salford Royal & University of Manchester, UK
5. Consultant Surgeon, Department of Surgery, Whittington Hospital, London, UK

Objectives
In the context of post-bariatric surgery (BS) improved survival and decreased overall morbidity of overweight population, BS are steadily increased around the globe. BS is considered to be safe however serious postoperative complications can happen. Intestinal failure (IF) is a rare complication but can be life changing for the patient. The aim of this audit is to investigate the incidence and outcomes of IF requiring total parenteral nutrition (TPN) among patients after BS.

Methods
We retrospectively analyzed two large tertiary IF unit databases of patients with a history of BS and IF necessitating TPN.

Results
A total of 31 (7 males, 24 females) patients were identified. Mean age was 37.6±11.2 years, with most common procedure the Roux-en-Y gastric bypass (23 patients) followed by sleeve gastrectomy (4 patients) and other procedures in 4 patients (gastric band, duodenal switch and jejunal-ileal bypass). The mean time from initial BS to postoperative complication was 48.6±63.3 months. Most common complications were internal herniation (6 cases), malabsorption (4 cases), fistula (4 cases) and thromboembolic event (4 cases). Referral to IF unit was made after 1 to 2160 days after bariatric complication (Mean: 518.8 days). All patients required home TPN with a mean duration of 925.7±787.4 days. Seven out of 21 patient (39%) were awaiting a reconstructive operation and among them, four patients are still on TPN. Patient that had reconstructive operation (61%), the duration of post-reconstruction TPN was 254.6±448.7 days.

Conclusion
This audit showed that IF requiring TPN post BS is a serious complication. Patients with RYGB are at higher risk developing IF requiring TPN with the most common presenting complication the internal herniation. Future audits could facilitate a wider evaluation of the IF post bariatric procedures, measures to prevent it, better patient counseling and early recognition postoperatively to prevent such a serious complication.

A30. Exploring the Utility of Staple Line Reinforcement in Sleeve Gastrectomy: A Nationwide Cohort Study

Authors: *Osama Niaz, Alan Askari, Andrew Currie, Emma Mcglone, Roxanna Zakeri, Omar Khan, Richard Welbourn, Chris Pring, Peter Small, Rachel Batterham, Omer Al-Taan, Kamal Mahawar, Ravikrishna Mamidanna* | United Kingdom

Introduction:
Sleeve gastrectomy is currently the most frequently performed procedure for obesity worldwide. This study uses national data from the United Kingdom(UK) to explore the potential benefit of staple line reinforcement in preventing complications such as leak or bleeding.

Methods:
Data from the National Bariatric Surgery Registry (NBSR) was used to identify patients who underwent a sleeve gastrectomy from Jan 2012 to Dec 2021 either as a primary procedure or a revision. Comparative and logistic regression analyses were undertaken to determine whether staple line reinforcement offered benefit in terms of staple line leak and bleeding.

Results:
According to the NBSR database, a total of 23,192 patients underwent a sleeve gastrectomy over the study period of whom 76.5% were female and the overall median age was 46 years (IQR: 36-53). The overall complication rate (both surgical and medical complications) was 3.2% (n=745). Specifically, the rate of surgical complication (either a staple line bleed or a leak) was 1.2% (n=280). Data on staple line reinforcement was available for 61.8% of the dataset (n= 14,331/23,192). Over the years, the use of staple line reinforcement of any variety declined significantly from 99.7% in 2012 to just 57.3% in 2021. There were no differences in the overall complication rate between the reinforced (2.8%) and the non-reinforced group (3.3%, p= 0.161). Specifically, the surgical complication rate (of bleeding or leak) was similar across both groups (non-reinforced: 1.5% (n= 43/2,873), reinforced 1.1% (n= 129/11,286), p= 0.189) as were the length of stay.

Conclusion:
Staple line reinforcement use has declined in the UK since 2012. There were no differences in terms of staple line leak or bleed whether reinforcement was used or not. This may be in part due to the significant technological improvement in stapling devices although further high-quality studies are required to ascertain this.

Abstracts – Posters

A01. Impact of bariatric surgery on urinary incontinence: Three year outcomes.

Authors: *Prasanna Ramana Arumugaswamy, Prabhjot Singh, Rajeev Kumar, Sandeep Aggarwal* | India

Background:
There is scanty evidence on the impact of bariatric surgery on urinary incontinence in the Asian population in the long term.

Methodology:
Patients who underwent bariatric surgery from June 2018 to June 2019 were screened using the International Consultation on Incontinence Questionnaire-Urinary Incontinence-Short Form (ICIQ-UI-SF) questionnaire. Patients having urinary incontinence (UI) were identified and followed until 3 years of surgery using the ICIQ-UI-SF. These were classified as having stress, urge or mixed type of urinary incontinence. The prevalence, change in scores and the number of pads used were compared at baseline and at follow up.

Results:
A total of 148 patients underwent bariatric surgery of whom, 41 patients (M= 2, F=39) had UI. Pure stress incontinence was seen in 70.7%, 19.5% had pure urge incontinence and rest had the mixed type. Using logistic regression, it was found that female gender was the most important predictor of having UI (OR: 8.33).
The prevalence of UI decreased from 27.7% at baseline to 3.4 % at 1 year and the results were sustained at 3 year follow up. The mean ICIQ UI SF score improved from 8.76 (SD=3.2) at baseline to 0.66 (SD = 2.1) at 1 year and this was well sustained at 3 year follow-up. . The proportion of patients with UI using any number of pads decreased significantly from baseline at 1 and 3 year follow up. There was also significant decrease in the number of patients having moderate to very severe UI. Proportion of patients showing resolution was highest among the stress incontinence group. Presence or absence of comorbidities did not significantly influence the ICIQ-UI-SF scores.

Conclusion:
Bariatric surgery leads to profound improvement in urinary incontinence in obese individuals which is well sustained until 3 year of follow up. Resolution rates might be higher in Asian population.

A02. Nutritional Risks One Year after One Anastomosis Gastric Bypass: Is It More Challenging than Sleeve Gastrectomy?

Authors: *Anna Aronis, Naama Shirazi, Nahum Beglaibter, Ronit Grinbaum, Wiessam Abu Ahmad* | Israel

One Anastomosis Gastric Bypass (OAGB) and Sleeve Gastrectomy (SG) are the most common bariatric procedures performed worldwide. However, considering that OAGB is a relatively novel procedure, the data on its nutritional outcomes is poor. As a procedure involving a malabsorptive component, OAGB can raise a concern about facing increased nutritional risks, compared to SG. The aim of the study was to compare nutritional outcomes and metabolic markers one year after the OAGB and SG procedures, while adhering to the current supplementation and follow up protocols adopted for each surgery. Retrospective analysis was performed for data on 60 adults undergoing primary OAGB, compared to 60 undergoing primary SG. Mean pre-surgery BMI for SG was 42.7 kg/m^2, and 43.3 kg/m^2 for OAGB. Mean weight loss was 39.0 kg for SG and 44.1 kg for OAGB. A multidisciplinary team followed up with the patients at least 3 times during the first year. The OAGB group presented a significantly sharper decline in total cholesterol and a trend for a sharper LDL decrease. HDL, triglycerides, and HbA1C improved in both groups, with no advantage to specific surgery. According to the iron-deficiency panel, hemoglobin declined by 0.5-1.0 g/dl in both groups (more in OAGB), without significant changes in ferritin and iron levels. Despite a slight decrease in albumin in both groups, its absolute level remained within the normal ranges. For both procedures, supplementation according to the existing protocols resulted in increased levels of vitamins D and B12, with even higher increase in folate for OAGB. We thus conclude that adopted nutritional recommendations and supplementation plans minimize the risk of deficiencies and result in improved metabolic biomarkers one year after OAGB, which is comparable to SG. Further consideration is needed for the decline in hemoglobin after both types of surgery procedures.

A04. New approach for the treatment of sleeve gastrectomy leak with laparoscopic roux en y bypass to the leak site as one step procedure

Authors: *Maher Hussain* | Lebanon

Aim:

Leak is one of the common complications of laparoscopic sleeve gastrectomy that result prolongation of hospital stay, morbidity and even mortality.

Methods:

I report new approach for the treatment of 51 leaks presented to me post laparoscopic sleeve gastrectomy with laparoscopic Roux En Y bypass to the leak site at the level of gastroesophageal area. Only 2 mortality , one was due to sepsis due to delayed surgery and one bleeding post removal of chest tube after surgery. This new approach is possible and feasible, and avoids stenting due to high failure rate, prolonged hospitalization and saves life of patients.

Results:

All leaks healed 7 days from surgery due to well vascularized small intestinal mucosa to mucosa anastomosis, except for 3 leaks that healed after 2 weeks of conservative treatment.

A05. SASI Bypass as a Revision surgery for Sleeve Gastrectomy Non-Responders:2 Years Follow up

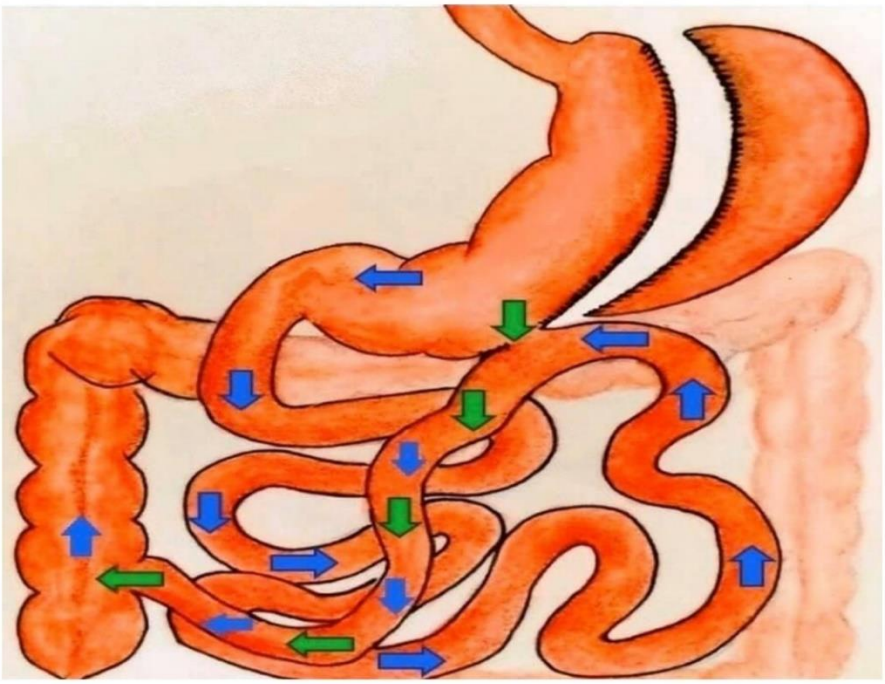
Authors: *Ibrahim Abdelhamid, Mohamed Alhaifi* | Kuwait

Introduction

Single Anastomosis Sleeve Ileal Bypass(SASI)is a Novel Metabolic/Bariatric Surgery operation based on Santoro's bipartition operation . It can be offered for patients with weight regain after Sleeve gastrectomy.
Abstract : Sleeve gastrectomy (SG)is a commonly performed bariatric procedure . Weight regain following SG is a significant issue .Yet , the understanding of this phenomenon is still unclear . Rates of regain ranged from 5.7% at 2 years to 75.6% at 6 years. SASI bypass was an option for some candidates having SG done 2 years back and failed to achieve the required weight loss or having weight regain . In SASI bypass ,Re-sleeve gastrectomy of the dilated gastric pouch is done followed plication of the stapler line then creating a Bipartition channel doing a side to side gastro-ileal anastomosis. The aim of this study is to report the clinical results and the outcomes of SASI bypass as a therapeutic option for patients with weight regain after SG

Patients & Methods

We conducted a retrospective study for 75 morbidly obese patients having history of SG done more than 2 years back and failed to achieve and/or to maintain the required BMI.
Exclusion criteria : Patients with history of Bypass Bariatric Surgery and patients with documented psychological instability or intolerability for regular follow up .
Procedure was done at Sidra Hospital in Kuwait from February 2017 to November 2019.
Using 5 ports, Re-sleeve Gastrectomy was performed over36 for bougie tube starting 6 cm above the pylorus then gastro-ileal anastomosis (side to side)was performed 6 cm above the pyloric ring to an ileal loop counted 300cm from the ileocaecal valve.
Data was collected from the patients including: Weight loss progress, laboratory full results.



Discussion and Results

During the study period:75 morbidly obese patients with a mean BMI of 44+/-6 Kg/m2 were evaluated .-%EWL(excess weight loss)reached 64% at two years-Diabetes was cured in the known diabetic patients (type2)within 6 months,
.-Follow up laboratory results were normal in 88% of patients (all were kept on regular vitamins and proteins supplementation for 2 years)
3 patients had hiatal hernia that was repaired during the procedure and 2 patients had asymptomatic gall stones that was discovered during the routine preoperative work up for whom Laparoscopic cholecystectomy was done at same cession before starting the SASI procedure.

Conclusion

-SASI Bypass is a promising operation that offers a good weight loss for morbidly obese patients having weight regain after SG..

A06. Laparoscopic sleeve gastrectomy in a patient with severe haemophilia (case report)

Authors: *Ibrahim Abdelhamid, Mohamed Alhaifi* | Kuwait

Key words:
Sleeve Gastrectomy, Morbid Obesity, Haemophilia A

Introduction:
Haemophilia A is an X linked inherited bleeding disorder caused by deficiency in coagulation factor VIII(FV III) .To prevent spontaneous bleeding in muscles and joints, patients with severe Haemophilia A should receive prophylactic replacement therapy. Dosing shall be adjusted according to body weight.

**Case presentation:-*
19 years old male patient who is well known to have Haemophilia A, that has been diagnosed shortly after birth during routine circumcision.
The Patient had presented to our clinic with Body Mass Index of 53.9 kg\m2. He was counselled for laparoscopic sleeve gastrectomy after failure of many trials to loose weight. He and his father were counselled for procedure pros and cons. Routine preoperative work up had been performed (Full labs, Abdomen Ultrasound, Dietician consultation, Anesthesia consultation, Cardiology consultation).
Haematological consultation had been done and consultant opinion was to give prophylactic factor VIII 7500 IU:
• 2 hours prior to surgery
• 24 hours after surgery
• 72 hours after surgery
Extra precaution had been taken in the perioperative period in the form of:
- Careful cannulation
- IM injections had been avoided completely
- No Anticoagulats
- 1:1 Nursing care
– careful Handling and positioning
- Continuous monitoring (planned ICU admission for first 24 hours then HDU admission for 48 hours).
- Senior anesthetist
- Senior anesthesia technician
- On table gastroscopy (same cession)
- Smooth bouji tube (size 36 fr.)
- Careful haemostasois:
    - slow Harmonic sealing
    - Clipping of short gastrics
    - 1minute stapler compression (All green)
    - Full stapler line plication and omental patching

-Maintenance of blood pressure to average range during surgery..

Patient had uneventful postoperative recovery, a part from mild sub conjuctival haemorrhages (Bilateral) that had subcided spontaneously.

Conclusion:-
Laparoscopic sleeve gastrectomy can be performed smoothly in patients with Haemophilia A with proper perioperative multidisciplinary care management.

A09. Simultaneous Occlusion of Afferent & Efferent Limb Due To Slippage of Minimizer Band Following Revisional Banded One Anastomosis Gastric Bypass: A Video Case Report

Authors: *Sandeep Aggarwal, Amardeep Kumar, Vitish Singla, Kaustubh Gaur* | India

Objective:
Banding of the bypass is an emerging trend while dealing with weight regain following sleeve gastrectomy. However, it comes at the cost of a few band-related complications. We present a video case report of one such rare complication.

Case Report:
A 34-year-old female presented with sudden onset, projectile, non-bilious vomiting associated with severe colicky epigastric pain for 2 days. She had undergone Laparoscopic Sleeve gastrectomy in 2010 and revisional-banded one anastomosis gastric bypass in 2019 for weight regain. Upper gastrointestinal endoscopy showed a dilatated and congested gastric pouch and efferent limb without any visibility of the lumen of the afferent limb. The efferent limb was empty without any bilious content. CECT abdomen showed a vertically oriented minimizer band and clumping of dilated bowel near the band with mild ascites. The patient was taken up for an emergency laparoscopy. There was efferent limb migration in the caudo-cranial direction through the slipped MiniMizer band causing complete blockage of the distal biliopancreatic as well as the efferent limb, 1.5 meters away from the gastrojejunostomy site. The band and the pseudo capsule were divided and removed to relieve the obstruction. There was no evience of bowel gangrene. The postoperative course was uneventful and the patient was allowed orally on postoperative day 1.

Conclusion:
Band slippage is a known but uncommon complication. Simultaneous occlusion of both limbs in the slipped band is a possibility. A high index of suspicion with a low threshold of CECT abdomen and Diagnostic Laparoscopy are necessary for management.

A11. Being a feeder: the positive and negative sides of social support in the onset and management of obesity

Authors: *Jane Ogden* | United Kingdom

Research consistently shows the positive impact social support on a number of health outcomes including improved quality of life and weight management in the context of obesity. Not all social support is positive, however, and some evidence indicates that friends, partners and family may undermine a patient's attempts at weight loss. This paper will explore different forms of negative social support and highlight differences in terms of intentionality, kindness, sabotage and collusion. It will then report data from two studies focusing on one form of negative social support, namely Being a Feeder.

Study 1 (n=229) involved the development of a new measure of Being a Feeder which identified 6 motivations (feeding for affection; waste avoidance; status; hunger avoidance; offloading; manners) and one subscale to measure feeder behaviour. The results showed that the best predictors of feeder behaviour were being motivated by love, offloading, manners and status.

Study 2 (n=76 couples) next explored how Feeder motivation and behaviour functions in couples.

The results showed a degree of reciprocity within couples for feeder behaviour and feeder motivations relating to waste avoidance, affection, manners and status. Dyadic analysis also indicated evidence for a more linear relationship with one partner's behaviour impacting upon their partner in a more one-way fashion. The results have implications for supporting both patients and their partners through the weight management process and could form the basis of a partner-directed intervention.

A12. Effects of LSG and LMGB/OAGB on lipid profile of patients post bariatric surgery

Authors: *Zafar Iqbal Gondal* | UAE

Background

Obesity is associated with increased mortality due to higher cardiovascular risk. Some proportion of the risk is attributed to dyslipidemia in the form of high levels of serum total cholesterol, triglycerides, and low levels of HDL cholesterol. Both procedures the laparoscopic sleeve gastrectomy (LSG) and laparoscopic Mini gastric bypass / One anastomosis gastric bypass (LMGB/OAGB) had shown to have some positive effects on lipid profile with some variability in improvement. We aimed to study the difference in changes in lipid profile after LSG and LMGB/OAGB.

Methods

This study was performed as a retrospective case-matched study which compared effects of LSG and LMGB/OAGB on lipid profile of patients who underwent bariatric surgery in the year 2018 and 2019. The matching was done based on criteria of initial body mass index (BMI).

Results

Out of a total 240 selected patients, 116 patients underwent LSG and 124 patients underwent LMGB/OAGB. There was a significant improvement in all four measures of lipids in LMGB/OAGB group. While serum triglycerides and HDL cholesterol improved significantly in LSG but no significant reduction was observed in serum total cholesterol and LDL cholesterol in LSG group. There was a significant reduction in cardiovascular risk calculated as total cholesterol: HDL cholesterol ratio following bariatric surgery overall ($p = 0.002$)., LMGB/OAGB ($p=0.002$) but insignificant in LSG ($p = 0.388$).

Conclusion
LMGB have better effects on lipid profile as compare to LSG. Also LMGB had better effect in terms of reducing cardiovascular risk attributed to obesity in UAE obese population. Thus, sleeve gastrectomy may be considered as less effective as compared to mini gastric bypass for dyslipidemia improvement in UAE patients.

Keywords: Dyslipidemia, Lipid profile, Bariatric surgery, Sleeve gastrectomy, Mini Gastric bypass

A14. Laparoscopic Roux-en-Y Gastric Bypass and Laparoscopic Sleeve Gastrectomy for Severe Obesity in Teenagers: study protocol of a prospective cohort study

Authors: *Kelly G.H. van De Pas, Daniëlle S. Bonouvrie, Loes Janssen, Wouter K. G. Leclercq, Eric J. Hazebroek, Anita. C.E. Vreugdenhil, François M.H. van Dielen* | Netherlands

Background
Rates of severe obesity in adolescents are rapidly increasing. Lifestyle interventions are the standard treatment for adolescents with severe obesity. However, only a small subgroup of adolescents with severe obesity are responsive to these lifestyle interventions. Recent literature supports the use of bariatric surgery in unresponsive adolescents. In the Netherlands bariatric surgery in adolescents is only allowed in the context of scientific research. Therefore, we propose a prospective cohort study of adolescents with severe obesity undergoing Roux-en-Y gastric bypass (RYGB) or sleeve gastrectomy (SG) in combination with a multidisciplinary lifestyle intervention, to implement and assess the feasibility, efficacy and safety of this treatment modality in the Netherlands.

Methods
A multicentre prospective cohort study. One hundred fifty adolescents aged 13-17 (Tanner stage ≥IV) with severe obesity (corrected for age and sex) who completed a minimum of twelve months in a lifestyle intervention and were unresponsive according to a multidisciplinary team will be included. Adolescents agreeing to participate will either receive a RYGB or SG based on the preference of the adolescent and the surgeon. The primary outcome is a composite outcome consisting of the proportion of adolescents presented to the national board achieving 20% total weight loss (%TWL) one year after surgery and the incidence of adverse health events or additional surgical interventions during 5 years follow-up. The national board is an independent board consisting of healthcare professionals who evaluate whether all the conditions for bariatric surgery according to the Dutch Society of Paediatrics have been met. Secondary outcomes involve the implementation of the multidisciplinary care pathway around the procedure and the

comparison of weight related outcomes before and after surgery, as well as between different subgroups.

Discussion
This study will be the first prospective cohort study covering the implementation of bariatric surgery in adolescents with severe obesity in the Netherlands.

A15. Evaluating the effects of a ketogenic diet versus a very-low calorie diet, prior to bariatric surgery, a Study protocol of a randomized controlled trial

Authors: *Aliyar Esfandiyari Noushi, M. Romeijn, L. Janssen, W.K.G Leclercq, F.M.H van Dielen* | Netherlands

Background:
Bariatric surgery is considered the most effective treatment for severe obesity. Preoperative weight loss is frequently advised to overcome perioperative challenges and to initiate long-term weight loss. Preoperative weight loss can be realised with a very low-calorie diet (VLCD) (<800 kcal/day) which is the gold standard, starting two weeks prior to surgery. Pitfalls of this diet is a loss of metabolically active fat free mass (FFM), preservation of excessive fat mass (FM) and intolerance of the diet due to side-effects. Poor compliance and subsequently minimal weight loss prior to surgery occur. A new type of diet for patients undergoing bariatric surgery is the Very low-Calorie Ketogenic Diets (VLCKD). VLCKD is characterized by a very low carbohydrate content, a low fat content and a high amount of proteins. The benefits compared to VLCDs are the aimed preservation of FFM, reduction of FM and improved compliance. Only a few small studies addressed the role of VLCKDs prior to bariatric surgery. The aim of this study is to assess the possible benefits of a VLCKD compared to the VLCD, in terms of compliance, preservation of FFM and loss of FM.

Methods:
This randomised controlled trial is powered on 50 patients undergoing bariatric surgery to be randomised to VLCKD or VLCD. The main outcomes are body composition and compliance. Secondary outcomes are surgical outcomes, difference in physical activity, patient satisfaction, muscle strength and biochemical analysis.

Conclusion:
This study will help establish the clinical utility of the VLCKD prior to bariatric surgery in comparison to VLCD.

A16. The Impact of Bariatric Surgery on Nocturia Symptoms: A Systematic Review and Meta-Analysis

Authors: *Caroline Baillie, Byung Choi, Aisha Ehsan, Maria Nakhoul, Lavandan Jegatheeswaran, Sabin Yadav, Dheeraj Panchaksharam, Victoria Beynon, Reya Srivastava, Jennifer Stevens, Joseph Bridgeman, Osama Moussa, Shashi Irukulla, Samer Humadi, Kumaran Ratnasingham* | United Kingdom

There is a significant association between obesity and nocturia, which can cause a significant negative impact on quality of life. This meta-analysis aims to determine the effects of bariatric surgery on nocturia in both men and women. Studies searched via MEDLINE and Embase databases. The primary outcome was difference in nocturia scores before and after bariatric surgery. A total of 522 patients were included in the analysis of this paper. Statistically significant decreases in nocturia scores were observed post-bariatric surgery. Bariatric surgery also resulted in statistically significant reduction of BMI. Bariatric surgery can have significant improvements on nocturia symptoms in men and women with obesity. This would thereby reduce morbidity and improve quality of life following bariatric surgery.

A20. Does Artificial Intelligence Make Sense for Metabolic/Bariatric Surgery

Authors: *Manana Gogol, Andrew Gumbs, Konrad Karcz, Khatuna Kaladze, Yameen Khan* | Georgia

Introduction:

The rising incidence of obesity is a global threat that is being only partially met by bariatric surgery. Use of minimal invasive access to metabolic/bariatric operations remains the most frequent bariatric procedure, but limited dexterity, poor ergonomics and increased fatigue on surgeons due to the increased abdominal wall thickness, increased fat deposits and hepatomegaly contributes to a limited and challenging working space for surgeons. Artificial intelligence (AI) is the tool for decision making, it includes a wide range of sub categories that includes machine learning (ML), natural language processing (NLP), computer vision (CV), deep learning (DL) and Robots. Despite the development of robotics and its evolution in abdominal surgery, the role of the complete robotic surgical system in obesity surgery still remains controversial.

This article aims to provide a better understanding of artificial intelligence involvement in the treatment of morbid obesity.

Methods:

A current systematic review of the available literature on artificial intelligence and metabolic/bariatric operations from 2011 till 2022.

Results:

The list includes articles that emphasize the relevance and importance of Artificial intelligence in metabolic/bariatric surgery. Results include preoperative and postoperative outcomes, the extent of the learning curve and the differences in cost. The literature notes advantages due to the facilitation of the procedure with use of artificial intelligence, as robotic-assistance, similar operating times; however costs are significantly higher with robotics. Notably, the length of stay and the learning curve are non-significantly higher for laparoscopy.

Discussion:

Randomized-controlled trials with longer follow up specifically looking at sustained rates of weight loss with artificial intelligence involvement (robots and etc) in Metabolic/Bariatric operation are still required to see if there are any significant benefits for better outcome.

Keywords: Artificial intelligence, Bariatric and Metabolic surgery, Morbid obesity

A21. Routine pre-operative testing for Helicobacter pylori infection prior to Laparoscopic Sleeve Gastrectomy (LSG)

Authors: *Sukhpreet Gahunia, Rafid Rahman, Cynthia Borg, Midhat Siddiqui, Ravikrishna Mamidanna* | United Kingdom

***Objectives**:*
The association of Helicobacter pylori (H.pylori) infection and outcomes following LSG is debatable. Early literature raised the suspicion of possible adverse outcomes but subsequent studies have not demonstrated any statistically significant correlation. However, due to the overall complication rate being low, small studies may not be powered to investigate this. The literature around relationship of H.pylori gastritis and symptoms of gastro-oesophageal reflux disease(GORD) is obscure.

***Methods**:*
We conducted a retrospective analysis of one hundred patients undergoing sleeve gastrectomy between August 2019 and April 2022. Data was collected on pre-operative symptoms, endoscopy findings, rapid urease test and/or biopsy results and postoperative histology. All patients listed for LSG in our unit undergo a preoperative endoscopy.

***Results**:*
100 patients who underwent LSG between August 2019 and April 2022 were included. Eighty of the patients were female and the mean age was 44 years. Of these, 16 patients (16%) reported pre-operative symptoms of GORD but none reported dyspepsia. Eleven patients were positive preoperatively for Helicobacter pylori infection and had eradication therapy. All resected stomachs were sent for histology. Ten of these were positive for presence of H.pylori and 40 specimens had a positive finding of chronic active gastritis. Eleven patients developed symptoms of dyspepsia postoperatively, but none of these had previous diagnosis or treatment for H.pylori. Interestingly, 20% of the patients developed symptoms of gastro-oesophageal reflux after LSG and of these 16 patients (80%) were found to have gastritis in the specimens.

***Conclusion**:*
H.pylori prevalence in patients undergoing LSG is significant. More importantly the findings of chronic gastritis in resected specimens is higher. There is currently no strong evidence to suggest this has a bearing on poor outcomes such as bleeding or leak. More studies are needed to investigate the association of H.pylori/gastritis with post-operative dyspepsia and GORD.

A22. Treatment Of Delayed Gastric Bypass Bleeding By Combined Endoscopic & Laparoscopic Approach

Authors: *Maher Hussain* | Lebanon

Aims:

Laparoscopic Gastric Bypass complications are well-known including leak, early postoperative bleeding, jejeunojejunal hernia, jejeunojejunal stenosis, and hernia defects.

Methods: We will present delayed Gastric bleeding 6 weeks post surgery referred from other hospital after transfusion with 6 units of PC due to erosion of left Gastric artery into the suture line.

Results:

The video will show the steps used by endoscopy to localize the bleeding site and laparoscopic approach to control the bleeding, and redo the anastomosis site.

Conclusion:

Treatment of Gastric Bypass complication is feasible by minimal invasive surgery in advanced center in Bariatric Procedures.

A23. Laparoscopic removal of intragastric balloon from distal jejunum

Authors: *Maher Hussein* | Lebanon

Aim:

Laparoscopic removal of intragastric balloon from distal jejunum.

Methods:

The video will show the steps used for the treatment of obstructive intragastric balloon in the distal jejunum diagnosed by CT Scan of the patient presenting to Emergency Department with evidence of obstruction and abdominal pain.

Results:

The balloon was removed by enterotomy and suturing it with Endo GIA 60mm with white cartilage Escheron.

Conclusion:

Patient had smooth post-operative course discharge 4 days after surgery.

A24. Laparoscopic bariatric procedures with the surgeon in sitting position

Authors: Maher Hussain | Lebanon

Aim: The advantages of Robotic surgery in comparison to standard laparoscopic surgery is the ability to do surgery in sitting position and 3D view and the ergonomic of movement and third

hand assistance but the disadvantages is one field surgery, the presence of a second surgeon in the field, extra expenses, the elongated time and absence of tactile sensation and the disadvantages of standard laparoscopic surgery is increased musculoskeletal complaint.

Methods:
I report my experience in the field of Laparoscopic surgery at the American University of Beirut MedicalCenter and affiliated hospitals where I shifted all laparoscopic procedures including Bariatric procedures to sitting position with 100% completion of the procedures in the first 1000 bariatric cases.

Results:
Laparoscopic sitting position will allow you to do long list surgery with decreased muscle fatigue, back and knee pain.

Conclusion:
Therefore, laparoscopic surgery is feasible in the sitting position and can maintain all the advantages of standard laparoscopies and avoid the disadvantages of Robotic surgery.

A25.Preoperative Predictors of Type 2 Diabetes Remission after Bilio-Pancreatic Diversion with Duodenal Switch

Authors: *Fannie Lajeunesse-Trempe, Marie-Eve Piché, Simon Marceau, Stéfane Lebel, Annie Lafortune, Georgios K. Dimitriadis, André Tchernof, Laurent Biertho* | United Kingdom

Background:
Many patients achieve short-term type 2 diabetes (T2D) remission after bariatric surgery, but relapses are common. Diabetes outcomes after bariatric surgery vary across procedures and populations. T2D remission scores are simple clinical tools developed to predict remission after bariatric surgery. However, they have never been tested after BPD-DS.

Objectives:
The aime of this study was to compare the predictive value of validated T2D remission scores and preoperative diabetes characteristics for prediction of durable T2D remission after BPD-DS.
Setting: Quebec Heart and Lungs Institute, Laval University
Methods: We retrospectively identified 918 patients with preoperative T2D who had undergone BPD-DS and for whom data (preoperative age, Body-Mass Index (BMI), Cpeptide, HbA1C, oral diabetes medications, insulin use, and diabetes duration) were available for calculation of T2D remission scores. T2D status was assessed annually for up to 10 years post-op. Predictive values for each score (DiaRem, Ad Diarem and Diabetter) and preoperative diabetes characteristics (diabetes duration, insulin use duration and HbA1C) were evaluated by area under receiver operating characteristic curves (AUC).

Results:

Diabetter showed the greater performance for prediction of durable diabetes remission with acceptable discriminative capacities (AUC between 0.69 and 0.79), but was not superior to T2D duration as a single predictor (p=0.24 and p=0.18). At 10 years, T2D duration had a better discriminative capacity for prediction of T2D remission than all three predictive models (AUC = 0.85, p <0.05).
Conclusions: Diabetes duration alone offers an excellent predictive capacity and is a convenient alternative to diabetes remission scores for long-term diabetes remission after BPD-DS.

A29. Perceptions and Understanding of Obesity and Bariatric Surgery (BS) amongst Foundation Year Doctors

Authors: *Sukhpreet Gahunia, M. Algharibeh, A. Shivarajan, C. O'Brien, CM. Borg, M. Siddiqui, R. Mamidanna* |UAE

Objectives
The COVID-19 pandemic highlighted to healthcare professionals and patients the increased morbidity associated with obesity. As the prevalence of obesity continues to rise, healthcare professionals are being exposed to the sequelae of obesity and metabolic syndrome. We sought to gain an insight into the perceptions of doctors in early training.

Methods:
An online questionnaire was distributed to all Foundation Year 1 (FY1) and 2 (FY2) doctors at Lewisham and Greenwich NHS Trust. The questionnaire comprised a mixture of questions around trainees' knowledge and perceptions on BS. All responses were anonymous.

Results:
31 trainees completed the questionnaire; 12 (38.7%) were FY1 and 19 (61.3%) were FY2 doctors. 26 (84%) of respondents believed obesity was a burden on society and 6.5% of them felt that BS was a cosmetic procedure. 1 in 4 doctors felt that BS should not be funded on the NHS using taxpayers' money. Almost all respondents recognised sleeve gastrectomy and adjustable gastric band as bariatric procedures (100% and 96.8% respectively).

However, Roux-en-Y gastric bypass and gastric balloon were less recognised [23 (74.2%) and 21 (67.7%) respectively]. 2 in 3 doctors did not think BS had any effect on Polycystic Ovarian Syndrome. 3 out of 4 doctors felt that BS should only be offered to patients who had tried weight loss through dieting and exercise. Although 18 (58%) of the respondents had not had any previous teaching or training about BS, 84% felt they would benefit from this.

Conclusion:
Our questionnaire has revealed some insightful attitudes towards BS amongst foundation trainees. Although the vast majority felt BS had an important role to play in treating obesity, there is still some stigma associated with obesity as a disease. Incorporating teaching on obesity and metabolic syndrome in the medical curriculum and early years of training will improve junior doctors' perceptions and knowledge on this worldwide epidemic.

A31. Complications and interventions post bariatric surgery: The East Anglia experience

Authors: *Mohamed Aly, Alan Askari, Minali Perera Safia Ahmed, H, Chanpreet Arhi, Vigyan Jain, Douglas Whitelaw, Tanveer Adil, Omer Al-Taan, Periyathambi Jambulingam, Aruna Munasinghe* | United Kingdom

Background:
Bariatric surgery has relatively low rates of complications, however, a small sub-set of patients will require admission, medical management and sometimes endoscopic or surgical intervention to manage. The aim of this study is to determine the type of interventions undertaken to manage post-operative complications and report outcomes following intervention.

Methods:
All patients who attended our centre between Sep 2018 and Sep 2021 having had recent bariatric surgery (whether in the UK or abroad) were included. Data on patient demographics, modes of intervention and outcomes were examined. The primary outcomes were location (local, other institutions within the UK, or abroad) and type of index bariatric procedure.

Results:
A total of 87 patients underwent 102 procedures, of which 79% were female. The median length of stay post intervention was 4 days (IQR 4 – 13). Most patients attended in (2020), followed by (2021). The most common index procedure was Roux-En-Y Gastric Bypass (37%), gastric banding (32%), balloon insertion (14%), sleeve gastrectomy (8%) and one-anastomosis gastric bypass. Overall, 39% of the patients had their initial procedure at our unit, 41% at another UK centre and 20% abroad. The most common emergency intervention was OGD (11% - 4% were therapeutic). Patients from other UK centres required removal of gastric bands (25%). Patients who underwent surgery abroad required OGD (5%), removal of gastric balloons (5%) or removal of gastric bands (4%).

Conclusions:
An increasing volume of patients who have bariatric surgery abroad are attending as an emergency and often require urgent intervention. Regional networks between hospitals and Bariatric centres are important in providing timely and specialist treatment. Further work is required to determine which patients are at high risk of requiring intervention post elective bariatric surgery as well as exploring the various drivers leading to patients seeking bariatric surgery abroad.

A32. To Study Outcomes Of Laparoscopic Proximal Jejunal Bypass With Sleeve Gastrectomy

Authors: *Ashish Ahuja, Harprabhjot Kaur* | India

Objectives:

To study Outcomes of Laparoscopic Proximal Jejunal Bypass with Sleeve Gastrectomy (LPJB-SG) in terms of weight loss, Nutritional status and Remission of type II diabetes.

Methods and Results:
A retrospective and prospective study was conducted in Department of Surgery, Dayanand Medical College and Hospital, Ludhiana on 40 obese patients with mean age 46.0 ± 8.3years. Mean weight, BMI, FBS, HBA1c, subcutaneous fat, skeletal muscle, body fat, visceral fat preoperatively was 116.8 ± 17.4kg, 44.1±6.5kg/m2, 181.0±45.3mg/Dl, 7.8±1.3, 45.6±6.0, 25.6±4.2, 45.2±4.5%, 24.1±5.2% which was followed at 4 months as 92.7 ± 13.6kg, 35.2±5.3kg/m2, 124.6±36.7mg/dL, 7.0±1.1, 38.8±2.7, 21.5±2.1, 42.0±1.5%, 17.5±4.3% respectively.

Conclusion:
LPJB with SG is technically simple and reversible with effective weight loss and diabetes remission in patients with BMI ≥32.5kg/m2.

A33. To study the change in quality of life and metabolic parameters in morbidly Obese patients undergoing bariatric surgery

Authors: *Ashish Ahuja, Harsimran Singh* | India

Objectives:
To assess the long term effectiveness of bariatric surgery on quality of life of obese adults and to compare the effect of bariatric surgery on metabolic parameters.

Methods and Results
A prospective study was conducted in Department of Surgery, DMCH, Ludhiana with 6 months follow up in 30 obese patients with mean age 42.8 ±11.8 years and mean height 5.42 ± 0.25 feet. Mean weight, BMI, SBP, DBP, FBS, HBA1c, triglycerides, physical domain, psychological domain and social domain preoperatively was 113.64 ± 16.91 kg, 43.91± 6.890 kg/m2 , 136.80 ±15.00mmHg, 88.60 ±9.4mmHg , 188.23 ± 47.50 mg/dL , 8.13 ±1.313 , 163.00 ±17.33 mg/dL, 13.53 ±1.85, 12.20 ±1.45, 11.27 ±1.28 which was followed up at 6 months post-op as 83.17±12.92 kg, 32.19±4.275 kg/m2, 131.93±14.70mmHg, 85.33 ± 9.00mmHg, 109.00 ± 23.90mg/dL, 6.19 ± 0.889 , 151.47 ±14.88mg/dL, 18.07 ±1.80 , 12.50 ±1.74, 13.83 ± 0.83 respectively.

Conclusion:
Bariatric surgery resulted in significant improvement in various metabolic parameters improving social, physical, psychological domains of life .

A34. Outcomes of Bariatric Surgery in the over Sixties

Authors: *Caroline Baillie, S Chakravartty, T Salih, R Kenny, R Newton, I Maheswaran, M Mlotshwa, G Slater, C Pring, W Hawkins* | United Kingdom

Due to often more advanced obesity-related disease and less time to benefit from intervention, there is doubt whether metabolic surgery should be offered to patients over sixty years old. Although there is evidence to its safety, there is little on the long term impact of surgery in this cohort. The aim of this study was to evaluate the long term effect of bariatric surgery on quality of life and obesity-related morbidity in the over sixties.

All patients above 60 years of age who underwent bariatric surgery between January 2015 and 2020 at a single centre were retrospectively identified. Telephone contact was made with patients using a standardised proforma. They were asked about weight, outcomes of obesity-related co-morbidities and quality of life according to EuroQoL-5D questionnaire. The primary end point was excess weight loss. Secondary endpoints included remission of diabetes, hypertension, sleep apnoea, mobility assessment and quality of life assessment.
97 patients were identified who underwent either Laparoscopic Sleeve Gastrectomy (n=20) or Laparoscopic Roux-en-Y Gastric Bypass (n=77). The median age was 63 years; weight was 129kg and BMI was 47 kg/m 2 . Mean hospital stay was 2 days, significant complication rate was 5% and mortality 1% within 30 days. The median follow up was 2 years. Excess weight loss was 67% at 2 years and 57% at 5 years. At 2 years, remission of diabetes was 56%, hypertensive medications and CPAP machines were no longer needed in 44% and 61% respectively. There was a significant improvement in overall quality of life at 2 – 5 years seen in mobility, self-care, activity and an overall satisfaction index.

In the over sixties, metabolic surgery appears to lead to a sustained improvement in quality of life with high patient satisfaction, suggesting that age alone should not be a contraindication to surgery.

A35. Hill's antireflux operation for reflux after sleeve gastrectomy

Authors: *Villy Våge, Jan Behme, Hannu Lyyjynen* | Norway

Objectives:
Although gastro-oesophageal reflux symptoms (GORS) after sleeve gastrectomy (SG) can be treated with PPI, some patients might need surgical intervention. The laparoscopic Hill's operation has high remission rates for reflux in the non-bariatric population and we have used it to treat GORS post-SG.

Methods:
All patients operated for GORS with laparoscopic Hill's operation post-SG were asked to fill out the GerdQ questionnaire and to have a gastroscopy pre- and postoperatively. The first six patients also had pre- and peroperative manometry.
The operation was performed under general anaesthesia without muscle blockers. Peroperative manometry was performed during and after tightening the Hill sutures to obtain a pressure of 20-25 mmHg in the lower oesophageal sphincter (LOS).

Results:

Eight women with a median age of 51 (range 29-66) were operated consecutively between May 2019 - December 2021. The median operating time was 200 minutes (range 143-248). No complications occurred. Median days in hospital was 2,5 (range 1-4). One patient was converted to roux-en-y gastric bypass after one year due to continuous reflux and not included in further analysis. The median follow-up time for the remaining seven was 12 mths (range 5-34):

Variable	**Preop** (n=7)	**Postop** (n=7)	**Comment**
Pressure i LOS, mm Hg: Median (range)	7,5 (0-19) * *	23 (20-23)*	* *Five and *six patients
Diaphragm – GO junction, cm: Median (range)	5 (2-6)	0,5 (0-1) *	*Six patients
Oesophagitis LA III or IV (n)	0	0 *	*Six patients
PPI ≥ 40 mg (n)	6	1	
Gerd Q score: Median (range)	12 (11-13)	7 (6-10)	
Gerd Q score Q 5 + 6	3 (2-6)	1 (0-3)	
BMI (kg/m^2): Median (range)	26	24*	*One pt Hills' + OADS

Conclusion
The Hill's procedure is a good option for treating reflux after sleeve gastrectomy.

A37. Bariatric surgery in renal failure patients improves access to transplantation without increased perioperative risk

Authors: *Karen Bosch, L Sulutaura,E Lacea,K Burton,N Fernandez-Munoz,P Sufi,A Al-Midani,C D Parmar* | United Kingdom

Department and Institute:
Department of Surgery, Whittington Hospital, London, United Kingdom
Consultant Surgeon and head, Department of Surgery, Whittington Hospital, London, United Kingdom
Department of Renal Transplantation, Royal Free Hospital NHS Foundation Trust, United Kingdom

Background:
Patients with obesity may have restricted access to renal transplantation as outcomes for obese recipients are poor. Bariatric surgery (BS) results in sustained long-term weight-loss. However, renal failure patients are theoretically higher risk candidates.

Objective:
We aim to investigate whether renal failure patients who have undergone BS 1) have acceptable outcomes and 2) achieve access to transplantation.

Methods:
We retrospectively reviewed data from 34 patients with renal failure who were referred for BS between 2013 and 2021. We compared the outcomes of renal failure patients who did (n=19)

and did not (n=12) undergo BS. In addition, a group of matched controls (MC) without renal failure were used for further comparison.

Results:
Of the 34 patients referred, 19 proceeded with BS (68% female, median age 52, BMI 46.2 $\pm$ 1.1 kg/m^2), 3 are completing work-up, and 12 did not proceed with surgery (58% female, median age 58, mean BMI 41.5 $\pm$ 1.3). The MC group has similar baseline characteristics and type of surgical procedure (74% female, median age 54, BMI 45.9 $\pm$ 1.4 kg/m^2, 94.7% sleeve gastrectomy). Excess body weight loss (EBWL) was 64.6% $\pm$ 5.3% at 1 year in renal failure patients versus 55% $\pm$ 7% in MC patients. In the operated group, 11/19 (58%) patients reached their treatment target (6 transplanted, 5 placed on waiting list) versus 3/12 (25%) in unoperated patients (3 transplanted). There was no difference in perioperative complications between renal failure and MC groups. There were 7 deaths in the renal failure groups (5 unoperated; 2 operated, unrelated to surgery) and no deaths in the MC group.

Conclusion
Increased access to renal transplantation is seen after BS in renal failure patients good long-term weight loss is achieved. No evidence of increased perioperative morbidity or mortality is seen. We therefore recommend consideration of bariatric surgery in obese renal failure patients.