

## VIDEO PRESENTATIONS

### **A30: Laparoscopic Roux-En-Y Gastric Bypass in the setting of Intestinal Malrotation (Video Presentation)**

Authors: *Karin Karam, Rahi Gandhi, Mark Murray, Ameet Patel, Hiba Shanti* | United Kingdom

#### **Background:**

Intestinal malrotation is a congenital anomaly resulting from incomplete rotation and fixation of the midgut during embryonic development. While up to 90% of symptomatic cases are diagnosed in infancy, adult presentation is rare, with an estimated incidence of <0.2%. In adults, it is usually identified incidentally on imaging or intraoperatively. Malrotation poses additional technical challenges in abdominal operations, particularly Roux-En-Y GastricBypass (RYGB).

#### **Case presentation:**

A 39-year-old female with morbid obesity (129 kg, BMI 44.3 kg/m<sup>2</sup>) and prediabetes was scheduled for laparoscopic RYGB following routine multidisciplinary assessment. After creation of the gastric pouch, the duodenojejunal (DJ) flexure was not visualised in its expected location. Further exploration revealed variant anatomy consistent with intestinal malrotation: the third part of the duodenum descended posterior to the right colon, with the DJ lying posterolateral to the ileocecal valve. This configuration precluded a tension-free gastrojejunostomy. A complete Ladd's procedure was undertaken to divide the peritoneal bands and broaden the mesenteric base. The colon was repositioned to the left side and the small bowel to the right. A retro-gastric route was required to achieve a tension-free gastrojejunostomy. The jejunoojejunostomy was fashioned in the right upper quadrant, and all mesenteric defects were closed. The procedure was completed without complication, and the patient had an uneventful recovery.

#### **Conclusion:**

Laparoscopic RYGB can be safely performed in patients with intestinal malrotation, but the procedure is technically challenging. Variant anatomy may necessitate additional mobilisation, a Ladd's procedure, or alternative limb routing. When malrotation is recognised preoperatively or early intraoperatively, sleeve gastrectomy should be considered as an alternative in suitable candidates. RYGB can further increase the complexity of the anatomy in the setting of malrotation, posing additional challenges for future diagnostic and surgical interventions.

**A11: Laparoscopic One Anastomosis Gastric Bypass (OAGB) in a Patient with Situs Inversus Totalis.**

Authors: *Mohamad Hamoud, Nasser Sakran | Israel*

**Laparoscopic One Anastomosis Gastric Bypass (OAGB) in a Patient with Situs Inversus Totalis: A Case Report****Objectives**

This video aims to highlight and discuss the operative challenges encountered during advanced laparoscopic one anastomosis gastric bypass (OAGB) in a patient with situs inversus totalis. It details a successful surgical approach for this rare anatomical variation.

**Methods**

A morbidly obese woman with a significant medical history, including hypertension, non-insulin-dependent diabetes mellitus, obstructive sleep apnea, and situs inversus totalis, underwent a laparoscopic OAGB. Her situs inversus was identified during preoperative evaluation.<sup>1</sup> The surgical team adopted a mirror-image approach to the entire operation, including trocar placement, to accommodate the reversed intra-abdominal organ anatomy. Pneumoperitoneum was induced via the right subcostal region, confirming the left-sided gallbladder and right-sided spleen, angle of His, and greater curvature of the stomach. The stomach was divided to create a long, narrow pouch. A gastrojejunostomy was performed after identifying the ligament of Treitz to the left of the midline, bringing an 180 cm biliopancreatic limb up to the pouch. Anastomosis was completed using a 45 mm stapler, and the enterotomy was closed with a V-LOC 3-0 device. A methylene blue leak test concluded the procedure.

**Results**

A laparoscopic OAGB was successfully performed in 50 minutes. Postoperatively, the patient began oral intake on day 1 and was discharged on day 3 in good medical condition. This case demonstrates that by employing a meticulous mirror-image operative technique, it is feasible to safely and effectively perform complex bariatric procedures like OAGB inpatients with situs inversus totalis, despite the inherent anatomical challenges.

## ORAL PRESENTATIONS

### **A09: Laparoscopic Fundoplication Takedown with Repair of Recurrence Hiatal Hernia and Conversion to Roux-en-Y Gastric Bypass**

Authors: *Mohamad Hamoud, Mohamad Hamoud, Nasser Sakran | Israel*

#### **Objectives**

This review aims to define failed Nissen fundoplication, discuss its prevalence, particularly in obese patients, and explore the conservative and surgical management options available for this challenging condition. A specific focus is placed on surgical alternatives for obese patients where repeat fundoplication may be less effective or carry higher risks.

#### **Methods**

This abstract includes **A video presentation of Laparoscopic Fundoplication Takedown with Repair of Recurrence Hiatal Hernia and Conversion to Roux-en-Y** and information from existing literature regarding failed Nissen fundoplication in obese patients. It examines the definition and prevalence of the condition, outlines conservative treatment strategies including medications and lifestyle modifications, and details various surgical interventions. Surgical methods discussed include revision fundoplication, conversion to Roux-en-Y gastric bypass, conversion to sleeve gastrectomy, and newer endoscopic alternatives like Stretta and LINX procedures. The rationale and considerations for each approach, especially in the context of obesity, are highlighted.

#### **Results**

Failed Nissen fundoplication is characterized by persistent or recurrent GERD symptoms, often due to an unwrapped fundoplication or hiatal hernia recurrence. While not extensively studied in large cohorts, prevalence in obese patients is estimated to be 10-20%, with obesity contributing to increased intra-abdominal pressure and potential wrap failure. Conservative management with **PPIs, lifestyle modifications** and sometimes prokinetic agents, can provide symptomatic relief for many. However, for persistent anatomical defects and in obese patients, surgical intervention is often Necessary.

**Revision fundoplication** is a challenging option with a high recurrence rate (30-40%), especially in obese patients (BMI > 35 kg/m<sup>2</sup>) where the risk of recurrent failure is high. **Conversion to ROUX-EN-Y** is an effective long-term solution, addressing both weight loss and reflux by reducing stomach capacity and nutrient absorption; it is particularly favored for regurgitation as a primary symptom.

**A13: Long-Term Outcomes of One Anastomosis Gastric Bypass: A Systematic Review and Meta-Analysis of 5-Year and Beyond**

Authors: *Anuja Mitra, Amit Bhambri, Matyas Fehervari, Chetan Parmar | UK*

**Introduction:** One-anastomosis gastric bypass (OAGB) has gained global prominence as the third most performed bariatric procedure. Despite evidence of short-term efficacy, long-term outcomes remain understudied.

**Methods:** This PRISMA-compliant systematic review and meta-analysis evaluated long-term ( $\geq 5$  years) outcomes of OAGB as primary and revisional procedures. Quality assessment and risk of bias evaluation were performed systematically.

**Results:** Thirty-two studies comprising 19,125 patients from 14 countries were included. Study quality was rated high. Seventy-six percent underwent OAGB as a primary procedure, 15% as a revisional intervention, and 9% of papers reported both cohorts. Baseline mean BMI was  $44.8 \pm 4.9 \text{ kg/m}^2$ , average age  $40.8 \pm 6.4$  years, and 68% were female. Mean follow-up duration was 6.7 years. At five years post-OAGB, mean excess weight loss (%EWL) was 75% (95% CI: 71–79,  $I^2=99\%$ ), increasing to 77% (95% CI: 72–81,  $I^2=99.8\%$ ) beyond. Hypertension improved in 69% (95% CI: 60–80,  $I^2=98\%$ ) and resolved in 61% (95% CI: 37–75,  $I^2=99\%$ ). Obstructive sleep apnoea improved in 93% (95% CI: 90–97,  $I^2=93\%$ ) and resolved in 89% (95% CI: 83–94,  $I^2=89\%$ ). Type 2 diabetes mellitus resolved in 80% (95% CI: 74–86,  $I^2=98\%$ ) and improved in 88% (95% CI: 83–93,  $I^2=93\%$ ). Complications included de novo bile reflux (4%, 95% CI: 3–5,  $I^2=96\%$ ), marginal ulceration (2%, 95% CI: 1–3,  $I^2=100\%$ ), and malnutrition (1%, 95% CI: 1–2,  $I^2=100\%$ ). Reoperation for conversion occurred in 3% (95% CI: 1–4,  $I^2=92\%$ ). QoL improved in 89% (95% CI: 82–95,  $I^2=61\%$ ). For revisional OAGB, %EWL at five years was 71% (95% CI: 66–76,  $I^2=44\%$ ), but 27% (95% CI: 4–57,  $I^2=94\%$ ) required further revision due to bile reflux.

**Conclusion:** This analysis demonstrates OAGB's long-term efficacy for sustained weight loss and comorbidity improvement, supporting its use as both a primary and revisional bariatric procedure.

**A35: Machine Learning–Guided Predictions of Outcomes for Robotic vs Laparoscopic Bariatric Surgery: US National Analysis**

Authors: *Amirreza Ehsani, Johann Paulo S Guzman, Fatemeh Moosaei, Amir Keyvan Sazgar, Nour Yanna Atassi, Kamel Brakta | USA*

**Background:** Robotic bariatric surgery is evolving and increasingly adopted worldwide, with surgeon learning curves and adaptability becoming critical factors. Existing evidence comparing laparoscopic and robotic approaches is mixed, with outcomes varying across centers and patient populations. To address this variability, we developed a machine learning model that generates individualized predictions based on patient demographics and comorbidities, integrating all potential complications. This allows a personalized comparison of expected outcomes using a large, national dataset.

**Methods:** We conducted a retrospective cohort analysis of 772,684 adults undergoing bariatric surgery in the MBSAQIP database (2020–2023), excluding open or endoscopic procedures. Primary outcomes were hospital length of stay (LOS), operative time, 30-day percentage BMI loss, and a composite complication score integrating all complications weighted by clinical severity. Baseline differences between robotic and laparoscopic cohorts were assessed using chi-square and t-tests. Multivariable regression adjusted for demographics, comorbidities, and procedure type. Candidate predictors included demographics, labs, comorbidities, ASA class, and surgical approach. Missing data were imputed, continuous variables standardized, and categorical variables one-hot encoded. Multiple supervised regression algorithms were trained, and a multi-output random forest was selected for its accuracy and generalizability. Feature importance and individualized outcome predictions for robotic versus laparoscopic approaches were generated.

**Results:** Of 772,684 patients, 589,312 underwent laparoscopic and 183,372 robotic surgery. After adjustment, robotic surgery was associated with higher rates of following complications, longer operative time (113.6 vs. 84.4 min,  $p<0.001$ ), and slightly longer LOS (1.40 vs. 1.34 days,  $p<0.001$ ), while BMI loss was marginally lower. The multi-output random forest accurately predicted BMI loss (RMSE 0.80, R<sup>2</sup> 0.97), composite complications (RMSE 0.15, R<sup>2</sup> 0.96), operative time (RMSE 10.1 min, R<sup>2</sup> 0.97), and LOS (RMSE 0.19 days, R<sup>2</sup> 0.97). Predictive accuracy was primarily driven by baseline BMI, age, and lab values. Individualized projections allowed selection of the optimal surgical approach per patient, balancing complications, efficiency, and weight loss outcomes.

**Conclusions:** In this nationwide analysis, robotic bariatric surgery was associated with longer operative times and, to some extent, higher complication rates compared to laparoscopic surgery. To individualize surgical decision making, we developed a machine learning model that incorporates patient-specific characteristics, including demographics and comorbidities, to predict robotic vs laparoscopic surgical approach based on expected changes in BMI, operative time, and risk of complications. This model demonstrates high accuracy in predicting these outcomes.

#### **A36: Can pre-operative skeletal muscle index (SMI) predict weight loss post bariatric surgery?**

**Authors:** Arkeliana Tase, Alex Loh, Osamah Niaz, Md Tanveer Adil, Vigyan Jain, Farhan Rashid, Periyathmabi Jambulingam, Douglas Whitelaw, Aruna Munasinghe, Omer Al-Taan, Alan Askari | UK

#### **ABSTRACT**

##### **Background**

The skeletal muscle index (SMI) reflects the relative muscle mass within the human body. While previous research has largely concentrated on the impact of weight loss on the development of sarcopenia, limited evidence exists regarding the influence of higher pre-operative SMI on post-operative weight loss

outcomes. This study aimed to investigate the relationship between pre-operative SMI and post-operative weight loss, and to evaluate whether SMI could serve as a predictive tool in bariatric patients.

### Methods

All patients who underwent bariatric surgery in our unit between 2018 and 2022 and had a pre-operative CT scan (for any indication) were included. SMI was calculated using standardised radiological methods in collaboration with a consultant radiologist. Pre- and post-operative weights and BMIs were extracted from our internal database. Pearson correlation analysis was performed to assess the association between pre-operative SMI and weight loss at 12 and 24 months.

### Results

Seventy-two patients were included, 84.7% of whom were female, with a median age of 47.0 years (IQR: 39.3–57.5). The median BMI at surgery was 43.5 kg/m<sup>2</sup> (IQR: 40.8–48.6). Median BMI reduction was 13.7 kg/m<sup>2</sup> (IQR: 7.1–16.6) at 12 months and 13.5 kg/m<sup>2</sup> (IQR: 6.5–17.2) at 24 months. The median SMI was 5.2 kg/m<sup>2</sup> (IQR: 5.0–5.7) for females and 5.6 kg/m<sup>2</sup> (IQR: 4.9–6.5) for males. Higher pre-operative SMI was significantly correlated with greater BMI reduction at both 12 months ( $r=0.78$ ,  $p=0.031$ ) and 24 months ( $r=0.81$ ,  $p=0.028$ ).

### Conclusions

Pre-operative SMI can be readily calculated using widely available imaging software. Patients with higher SMI appear to achieve greater BMI reduction within the first two years following bariatric surgery. These findings suggest that SMI could be a valuable predictive tool for post-operative weight loss outcomes.

### A58. Can ChatGPT Predict 30-Day Readmission After Bariatric Surgery? A Pilot Validation Study

*Bhanderi S, Westerman R, Ingle P, Cheruvu C / UK*

#### Introduction:

Large Language Models (LLMs) such as ChatGPT are emerging tools for clinical decision support, but their predictive capability for postoperative outcomes remains uncertain. Thirty-day readmission following bariatric surgery is an important quality indicator associated with patient morbidity and increased healthcare cost. This pilot study evaluated whether ChatGPT could predict 30-day readmission using standard preoperative variables.

**Methods:**

Data from 100 consecutive bariatric patients at a UK tertiary centre were analysed. Structured preoperative variables including demographic factors, BMI, comorbidities and both intended and actual procedure performed were entered into ChatGPT 5 using a standardised structured prompt, requesting a prediction and brief justification. Actual readmissions were confirmed from electronic records. Model performance was assessed using accuracy, sensitivity, specificity, predictive values and Cohen's kappa.

**Results:**

The observed 30 day readmission rate was 7.1% (n=7). ChatGPT correctly classified 87% of patients ( $\kappa=0.41$  [0.18-0.63];  $p<0.01$ ), demonstrating sensitivity 57%, specificity 91%, PPV 33% and NPV 97%. Misclassified cases predominantly involved patients readmitted for potential postoperative complications rather than actual ones, which aren't inferable from preoperative data. ChatGPT's text explanations emphasised ASA $\geq$ 3, T2DM and OSA as key risk drivers.

**Conclusion:**

ChatGPT achieved moderate agreement with actual readmission outcomes, performing well in identifying low risk patients but less reliably predicting rare events. Whilst not a replacement for established risk models, this proof of concept highlights the feasibility of AI based postoperative risk stratification and provides a foundation for larger scale research, such as using National Bariatric Surgery Registry (NBSR) data.

## **E-POSTERS**

### **A01: Bariatric Surgery and Iron Deficiency Anemia: A Retrospective Cohort**

Authors: *Jaafar AL Shami, Ghadir Hijazi, Georges Gandour, Hussein Mcheimeche | United Kingdom*

**Abstract:**

**Introduction:** Bariatric surgery has been for a long time one of the most successful interventions when it comes to tackling obesity and preventing its complications. However, weight loss procedures do not come without shifting the balance in metabolism, through new metabolic and nutritional challenges. One association worth noting is Roux en Y Gastric Bypass (RYGB) and its implications in causing iron deficiency anemia (IDA). Our study focuses on analyzing the association of IDA and its prevalence post-bariatric surgery to further deepen our understanding of such new realities in bariatric patients.

**Methods:** Our study applied a retrospective cohort design, where 3000 Lebanese patients who underwent bariatric surgery, were selected from a single center, at ----- Hospital from the years 2008 till 2018. Medical records were carefully reviewed for demographics, BMI, type of surgery, and postoperative complications, including IDA. The SPSS system was employed for our statistical analysis, in

which emphasis was put on IDA incidence after primary, revisional, and concomitant cholecystectomy procedures.

**Discussion:** Iron deficiency anemia was observed in 23 patients (0.76%) following primary bariatric surgery, one case post-revisional surgery, and two after concomitant cholecystectomy with redo surgery, with an overall statistical significance of  $p = 0.046$ . The majority of cases were documented post-RYGB, a factor that is of added value to the link between malabsorptive procedures and the risk of IDA. It is also worth noting how IDA occurrence can play a role in poor wound healing, delayed recovery, and fatigue.

**Conclusion:** Iron deficiency anemia is a complication worth understanding its incidence and impact post bariatric surgery, especially after surgical procedures such as RYGB with malabsorptive components. Although a low prevalence was noted, there is still a requirement for screening alongside nutritional monitoring. Iron supplementation as a prophylactic should be tailored according to the type of bariatric surgery opted for, and the overall strategy of weight loss to ensure the best care for our patients.

#### **A02/A05: Concomitant Cholecystectomy with Revisional Bariatric Surgery: A Necessary Standard or Case-by-Case Decision?**

Authors: *Jaafar AL Shami, Ghadir Hijazi, Georges Gandour, Hussein Mcheimeche* | United Kingdom

##### **Abstract:**

**Introduction:** One of the most controversial discussions in bariatric surgery is centered around the management of gallbladder pathology during revisional bariatric surgery. Alongside the high incidence of gallbladder stones post-bariatric surgery as a result of rapid weight loss, some professionals may advocate for prophylactic cholecystectomy, while others may suggest more selective approaches. Our paper focuses on. Studying the necessity of concomitant cholecystectomy during revisional bariatric surgery.

**Methods:** Our study applied a retrospective cohort design, where 3000 Lebanese patients who underwent bariatric surgery, were selected from a single center, at — Hospital from the years 2008 till 2018. 44 of those patients underwent revisional bariatric surgery. Our study compared the outcomes between patients who had a concomitant cholecystectomy ( $n=6$ ) against those who needed such a procedure later ( $n=20$ ). Associations between comorbidities such as Hypertension (HTN), Body Mass Index (BMI), Iron Deficiency Anemia (IDA), and symptomatic cholelithiasis were also evaluated.

**Discussion:** Our findings concluded that only 4.16% of cases received a concomitant cholecystectomy, while 13.88% required the procedure postoperatively. Statistically significant associations were observed between symptomatic cholelithiasis and hypertension ( $p=0.021$ ), BMI  $> 40$  ( $p=0.013$ ), and iron deficiency anemia ( $p=0.046$ ). Worth noting, Roux-en-Y Gastric Bypass (RYGB) was analyzed to have a

greater risk concerning the occurrence of gallbladder stones ( $p=0.051$ ). Our results add to the discussion that considering prophylactic cholecystectomy is not always warranted and that many risk factors come into play for such a surgical decision.

**Conclusion:** Prophylactic cholecystectomy during revisional bariatric surgery remains a controversial discussion, however, our study leans more toward a case-by-case decision as many factors become intertwined, from risk factors to surgical decisions, and preferences. We believe a multifactorial case-by-case evaluation with risk stratification can aid in improving patient outcomes and preventing unnecessary complications or interventions.

**A03: Hypertension as a Novel Predictive Marker for Symptomatic Cholelithiasis in Post-Bariatric Patients: Coincidence or Causation?**

Authors: *Jaafar AL Shami, Ghadir Hijazi, Georges Gandour, Hussein Mcheimeche* | United Kingdom

**Abstract:**

**Introduction:** As obesity is well known to be associated with gallstone pathology, new advances have shown the role hypertension may play in predicting the occurrence of the latter. This study analyzes the correlation between symptomatic cholelithiasis post-bariatric surgery and hypertension.

**Methods:** Our study applied a retrospective cohort design, where 3000 Lebanese patients who underwent bariatric surgery, were selected from a single center, at — Hospital from the years 2008 till 2018. 485 patients have been documented to have hypertension. Chi-square testing was employed to correlate symptomatic cholelithiasis incidence with subsequent cholecystectomy with hypertension status.

**Discussion:** Our data showed a significant association between hypertension and symptomatic gallstones ( $p = 0.021$ ). While causation can not be concluded, this possible interaction may stem from common metabolic pathways regarding bile composition and cholesterol homeostasis. Our findings shed light on the added value of emphasizing hypertension as a variable in risk models. Such an emphasis in the management of bariatric cases may bring some surgical scenarios as better and safer options such as concomitant cholecystectomy during bariatric or redo surgeries.

**Conclusion:** Hypertension may sometimes be overlooked as a potential marker for the risk of gallstone occurrences post bariatric surgery. This study opens the door for further investigations as more data and evidences is required to properly decorticate the intensity of the association or causation between hypertension and gallstone formations, especially with bariatric surgeries, which may be seen as a synergistic component to the occurrence of cholelithiasis.

**A04: Surgical Sequencing in Complex Obesity Patients: Outcomes of Sequential Bariatric Procedures and Gallbladder Interventions**

Authors: *Jaafar AL Shami, Ghadir Hijazi, Georges Gandour, Hussein Mcheimeche* | United Kingdom

**Introduction:** Bariatric surgeries have evolved drastically over the years, increasing in complexity, and diversity. At the same, the stories of revisional procedures have become part of the routines of bariatric surgeons, with gallbladder diseases presenting an important associated factor of repeated surgeries. Our study focuses on the outcomes of sequential bariatric procedures and their association with gallbladder pathologies, hence cholecystectomy.

**Methods:** Our study applied a retrospective cohort design, where 3000 Lebanese patients who underwent bariatric surgery, were selected from a single center, at — Hospital from the years 2008 till 2018. Our investigation was centered around 144 patients who had undergone revisional surgery. Surgical combinations such as Sleeve Gastrectomy (SG) with Roux-en-Y Gastric Bypass (RYGB) or RYGB with Mini Gastric Bypass (MGB) were observed in comparison regarding rates of post-operative cholecystectomy.

**Discussion:** Our study showed that SG with RYGB cases were the ones experiencing the highest incidence of cholelithiasis, thus requiring cholecystectomy (29.3%) with a statistical significance of  $p = 0.021$ , unlike other combinations. These results propose the risk of gallstone occurrence with some bariatric surgical sequences, probably related to the synergistic effects between bile saturation and motility.

**Conclusion:** Bariatric surgical sequencing may have different influences on the risk of incidence of gallbladder diseases. SG+RYGB was shown to have a greater risk in our study and may raise concern about the requirements of prophylactic strategies such as concomitant cholecystectomy during redo surgery, or improved monitoring. Our findings are of added value in helping professionals personalize bariatric strategies toward better outcomes and fewer complications

**A05: Concomitant Cholecystectomy with Revisional Bariatric Surgery: A Necessary Standard or Case-by-Case Decision?**

Authors: *Jaafar AL Shami, Ghadir Hijazi, Georges Gandour, Hussein Mcheimeche* | United Kingdom

**Abstract:**

**Introduction:** One of the most controversial discussions in bariatric surgery is centered around the management of gallbladder pathology during revisional bariatric surgery. Alongside the high incidence of gallbladder stones post-bariatric surgery as a result of rapid weight loss, some professionals may advocate for prophylactic cholecystectomy, while others may suggest more selective approaches. Our paper focuses on. Studying the necessity of concomitant cholecystectomy during revisional bariatric surgery.

**Methods:** Our study applied a retrospective cohort design, where 3000 Lebanese patients who underwent bariatric surgery, were selected from a single center, at Al Zahraa University Hospital from the years 2008 till 2018. 44 of those patients underwent revisional bariatric surgery. Our study compared the outcomes between patients who had a concomitant cholecystectomy (n=6) against those who needed such a procedure later (n=20). Associations between comorbidities such as Hypertension (HTN), Body Mass Index (BMI), Iron Deficiency Anemia (IDA), and symptomatic cholelithiasis were also evaluated.

**Discussion:** Our findings concluded that only 4.16% of cases received a concomitant cholecystectomy, while 13.88% required the procedure postoperatively. Statistically significant associations were observed between symptomatic cholelithiasis and hypertension ( $p=0.021$ ), BMI  $> 40$  ( $p=0.013$ ), and iron deficiency anemia ( $p=0.046$ ). Worth noting, Roux-en-Y Gastric Bypass (RYGB) was analyzed to have a greater risk concerning the occurrence of gallbladder stones ( $p=0.051$ ). Our results add to the discussion that considering prophylactic cholecystectomy is not always warranted and that many risk factors come into play for such a surgical decision.

**Conclusion:** Prophylactic cholecystectomy during revisional bariatric surgery remains a controversial discussion, however, our study leans more toward a case-by-case decision as many factors become intertwined, from risk factors to surgical decisions, and preferences. We believe a multifactorial case-by-case evaluation with risk stratification can aid in improving patient outcomes and preventing unnecessary complications or interventions.

**A06: Gastric Outlet Obstruction as an Early Complication of Intragastric Balloon treatment for Obesity: A Case Report.**

Authors: Fathi Elzowawi, Mohamed Elgobi | Libya

Note : CT scan video , and removal video recorded

**Abstract**

**Back ground :** Obesity is a global health challenge with significant morbidity and mortality, including an increased risk of cardiovascular disease, diabetes, and cancer. For patients unable to achieve weight loss through traditional lifestyle modifications, bariatric surgery remains the most effective intervention. However, due to its invasive nature and associated risks, minimally invasive alternatives like intragastric balloon (IGB) therapy have gained popularity. IGBs are temporary, designed to induce satiety and promote weight loss. Despite their safety profile, complications such as nausea, vomiting, and, rarely, gastric outlet obstruction (GOO) can occur,

**Objective :** to present a rare complication of intragastric balloon and its management .Case report / Method : here we report a case of a 49-year-old overweight male who presented with history of intragastric balloon placement 4 weeks back . his weight before placement 102 kg , BMI 34.1 , patient

complaining of nausea vomiting , abdominal pain and distention for last one week , patient current weight at presentation 84 , BMI 28.4 On examination , patient on pain looks dehydrated , abdomen tender and distended at mid abdomen , his labs WBC 6.5 , CRP 10 , K 3.4 . CT SCAN Abdomen reveals huge distended stomach with trapped balloon at pyloric region . Patient admitted in surgical department overnight , IV fluid replacement started , nasogastric tube inserted , Patient vomit bad smelly food content , lavage with warm fluids till content become clear , patient taken to operation room next day of admission , under General anesthesia , balloon deflated and extracted from stomach by upper endoscopy.

**Result :** The patient was treated successfully with endoscopic deflation and removal of the balloon. This case underscores the importance of recognizing GOO as a potential complication of IGB therapy, even in the early post-insertion period.

**Conclusion & recommendation :**Clinicians should maintain a high index of suspicion for GOO in patients presenting with persistent gastrointestinal symptoms after IGB placement specially after first week of placement , to ensure timely diagnosis and management.

#### **A07: Outcomes of Omega Loop Gastric Bypass, 6-Years Experience of 1520 Cases**

Authors: Ahmed Aosmali, Osama Taha, Mahmoud abdelaal, Sevilay Aligulu, Awny Askalany | united kingdom

##### **Abstract:**

**Background :**Omega loop gastric bypass (OLGB) has been viewed with skepticism after the failure of the Bold Masonloop.<sup>^</sup> During the past 15 years, a growing number of authors worldwide approved that OLGB is a safe and effective procedure, which appears clearly from the operative outcome and. long-term follow-up of consecutive cohort studies of patients who underwent OLGB. The aim of this study :is to evaluate the outcomes of OLGB at the bariatric center of our university hospital between 2009 and 2015.

**Methods :**The data of 1520 patients who underwent OLGB from November 2009 to December 2015 at our center were reviewed. Mean age was 37.15 years, mean preoperative BMI was  $46.8 \pm 6.6$  kg/m<sup>2</sup> , mean preoperative weight was  $127.4 \pm 25.3$  kg, and 62.7% were women. Diabetes mellitus (DM) affected 683 (44.9%) of the 1520 patients, whereas 773 of the 1520 patients (50.9%) presented with hypertension. The mean operative time was 35 min.

**Results:** The 1-year postoperative BMI mean decreased to  $29.6 \pm 3.1$  kg/m<sup>2</sup> , and at the 3-year follow-up, it was  $27.5 \pm 3.4$  kg/m<sup>2</sup> . The mean of weight decreased to  $81.3 \pm 16.7$  kg and to  $78.9 \pm 16.9$  kg at the 1-year and the 3- year follow-up, respectively. Mortality rate was 0.1%. Overall complications were 9.3%; 0.8%required reoperations. Early complications were encountered in 50 patients (3.3%), and the late complications rate was (6.1%).

**Conclusions :**

In this study, greater excess weight loss was observed with OLGB which appeared to be a short, simple, low risk, effective, and durable bariatric procedure.

**A08: Evaluation of Erectile Function In Morbidly Obese Male Patients Undergoing Bariatric Surgery using IIEF-5 Score**

Authors: *Choudhary Jagdeep | india*

**Introduction :**Obesity is a worldwide epidemic. It is one of the leading preventable causes of death worldwide with increasing prevalence in both adults & children. Neuroendocrine & sexual aberrations are common in obesity & severity is compared to long term effects of aging. Erectile dysfunction(ED) is inability to attain erection for sexual activity is common in obese patients which has been attributed to serum testosterone levels & endothelial dysfunction associated with proinflammatory state of obesity.

**Objectives:** To compare the outcome of Erectile dysfunction in morbidly obese male patients undergoing bariatric surgery using IIEF-5 score.

**Methods:** The study was conducted at —Medical college & hospital on Male obese subjects undergoing bariatric surgery over One & half years who consented for the study. Evaluation by Andrologist regarding counseling, hormonal evaluation & secondary assessment of secondary sexual characters was done.

**Results:** A total of 17 patients who consented for the study were included. Weight was measured before surgery .138.71-17.51Kgs. Significant weightloss was there mean 116.53-15.649 Kgs .There was significant improvement seen on IIEF-5 score, hip circumference, & improvement in sex hormones.

**Conclusion :** Bariatric surgery improves Male erectile function, evident by an improvement in IIEF-5 score, testosterone levels, LH & Fsh. Lipid profiles & Glycemic controls also improved over follow up time.

**A10: Laparoscopic Conversion of One Anastomosis Gastric Bypass for Gastrojejunral Anastomosis Stricture to Roux-en-Y Gastric Bypass**

Authors: *Mohamad Hamoud, Mohamad Hamoud, Nasser Sakran | Israel*

**Background:** One-anastomosis gastric bypass (OAGB), is an increasingly popular bariatric surgery option worldwide. Nonetheless, some patients may need to convert to Roux-en-Y Gastric Bypass (RYGB) to correct complications such as stricture of Gastro-Jejunal Anastomosis (GJA). We present the case of a



patient with a history of OAGB complicated by perforated marginal ulcer (MU) and subsequent GJA refractory to endoscopic dilation that ultimately required reoperation.

**Case Summary:** A 33-year-old female, presented with a refractory MU following OAGB. In 2019, the patient underwent laparoscopic OAGB for morbid obesity. In 2021, she had MU-related perforation, requiring emergent revision. Preoperative endoscopy showed severe stenosis of the GJ. Helicobacter pylori was negative. After treatment with high-dose PPI was unsuccessful and endoscopic balloon dilation, the patient underwent re-intervention, and the OAGB was converted to RYGB using a laparoscopic approach. The patient had decreased appetite and intermittent abdominal pain, which made it difficult for her to maintain a healthy weight. Treatment options were discussed with a multidisciplinary team and the patient.

**Operative Summary:** The video illustrates all the important surgical steps required to convert this patient to RYGB: A 5-port technique. The stricture of the GJA was identified. The GJA was resected using ECHELON ENDOPATH™ Staplers. The biliopancreatic limb length was 200 cm, the Roux limb 40 cm. The new gastroenterostomy was then closed with V-Lock continuous suture. A standard antegastric, antecolic Gastric Bypass was performed. The patient is currently one year out from surgery. Her BMI is 22.8 kg/m<sup>2</sup>, and she reports satisfaction with the procedure.

**Conclusions:** resecting the previous gastro-jejunal anastomosis and conversion of OAGB to RYGB is the right and definitive treatment for anastomotic stenosis after OAGB and it is technically feasible.

#### **A12: Laparoscopic Conversion of SRVG to OAGB with Diaphragmatic hernia repair**

Authors: *Mohamad Hamoud, Mohamad Hamoud, Nasser Sakran | Israel*

**Background:** In the 1980s and 1990s, the SRVG surgery started, which was performed with an open approach during which an elongated pouch was created as a direct continuation of the esophagus and along the small curve, at the end of which a small non-adjustable silastic ring was placed.

**Objectives:** Further studies looking at the conversion of a SRVG to a Roux-en-Y gastric bypass (RYGBP) or one anastomosis gastric bypass (OAGB) showed positive results, which helped establish the gastric bypass as the **Best procedure** for revisional bariatric surgery.

#### **Video Presentation:**

A 49-year-old patient underwent Silastic ring vertical gastroplasty (SRVG). 26 years later, GERD symptoms recurred, and 7 years following surgery his weight increased progressively (BMI of 43 Kg/m<sup>2</sup>). A gastroscopy and a double contrast esophagus-stomach fluoroscopy, that preceded the surgery showed a diaphragmatic hernia with reflux and wide fundus pouch.

**Methods:** The procedure was performed under laparoscopy. The silastic ring was initially removed. The hiatal region was totally exposed during the procedure and a crurorrhaphy was performed. The gastric pouch was divided beneath the second vessel of the lesser curvature. a small gastrotomy was created in the posterior wall of the right corner of the pouch. The fundus and the body of stomach was removed because it appeared ischemic. Creation a 180 cm biliary limb, a 30 cc stomach pouch. The bowel is rotated clockwise and divided 180 cm distal to the ligament of Treitz and gastro-jejunostomy was created by side to-side anastomosis. The opening defects were closed with V LOC suture.

**Results:** The procedure was uneventful, and the patient was discharged on postoperative day 3.

**Conclusion:** Conversion of one anastomosis gastric bypass (OAGB) is safety and showed positive results, which helped establish the gastric bypass as the **Best procedure** for revisional SRVG.

#### **A14: Post Bariatric Surgery Monitoring in Primary Care**

Authors: *Karim Awad, Arisha Hussain | United Kingdom*

##### **Audit bariatric surgery**

##### **Introduction**

A recent clinical debrief at the GP practice identified that several patients with a history of bariatric surgery were not receiving follow-up care in accordance with BOMSS guidelines, with adverse effects on health outcomes. A review of patient records was undertaken to identify gaps in care, areas for improvement, and potential trends.

##### **Aim**

The purpose of this audit is to identify all registered patients with a history of bariatric surgery and to assess whether they are receiving appropriate monitoring in line with BOMSS guideline recommendations.

##### **Method**

A search of the practice's clinical system (System One) was conducted using a filter to identify patients with bariatric surgery documented in their medical records. Forty-six patients were identified. Four were pre-operative and two were no longer registered with the practice, resulting in a final sample size of 40 patients. A data collection table was developed in Microsoft Word, incorporating headings based on BOMSS guidelines as well as additional fields relevant to bariatric follow-up care. The table headings are shown below.

Name/NHS of Patient	Date of Surgery	Type of Surgery	Vitamin Supplements?	Annual blood tests?	Contraception advice?	Nutrition advice and DEXA	Weight
---------------------	-----------------	-----------------	----------------------	---------------------	-----------------------	---------------------------	--------

## Results

Review of vitamin supplementation records showed that some patients were prescribed part, but not all, of the supplements recommended for their specific surgical procedure. This was further analysed and is presented below. For gastric bypass patients, a multivitamin is the only supplement required under current guidance. Similarly, the analysis of post-operative blood test monitoring indicated that annual testing was not being performed consistently. Data from the past year were reviewed and are summarised below.

Blood tests in the last year	Gastric Bypass	Gastric Sleeve	Gastric Banding
FBC	8/18	6/14	1/3
Corrected Calcium (bone profile if not available)	8/18	6/14	
Liver Function Test	8/18	6/14	
Urea and Electrolytes	7/18	6/14	
Haematinics	7/18	6/14	1/3
HbA1C, lipid profile		6/14	
Vitamin D	6/18	6/14	
Zinc		3/14	
Copper		3/14	
Selenium	3/18		
Vitamins E/A/K1	3/18		

**A15: Intra Gastric Balloon As A First Stage In The Super Obese Patients. Is It Worthwhile?**

*Authors: Shoieb Hossain Mridha, Ishleen Oberoi, John Finney, Srinivasan Balchandra, Peter Vasas, Nehemiah Samuel, Sashi Yeluri | United Kingdom*

**Objectives:**

Patients with super obesity require complex treatment and staged approach for weight loss. Intra-gastric balloon (IGB) is an accepted modality for treatment of obesity. However, the efficacy of IGB in the super obese patients as a first stage has not been clearly established. The study aims to evaluate the efficacy of IGB as first stage in this select patient population.

**Methods:**

Patients who received IGB as a first stage procedure as part of a staged approach, in our unit, from 2011 to 2021 were included in a prospective database. Demographic data, and weight loss results before and after 6 months of balloon insertion were analysed using Microsoft Excel.

**Results:**

14 patients were included in the study. All patients received routine IGB support, followed by planned endoscopic removal. Balloon was taken out early from one patient due to intolerance. Majority of the patients were male (64.2%). Median body mass index (BMI) prior to balloon insertion was 66.95 kg/m<sup>2</sup> (interquartile range {IQR}: 55.8-72.5 kg/m<sup>2</sup>) with a median weight of 197.2 kg (IQR: 166-237 Kg). Median total weight loss for all patients at 6 months was 10.5 Kg (range: -4.9-39.6). Two patients gained weight, and a third patient did not lose any weight.

**Conclusion:**

IGB as a first stage procedure in patients with super morbid obesity achieved limited reduction in weight. It appears to have limited value in making the 2nd stage safe. Further data is required before IGB can be established as a first stage approach in this patient population.

**A16: Outcomes of Omega Loop Gastric Bypass, 6-Years Experience of 1520 Cases**

Authors: Ahmed Aosmali, Momen abdelglil, Osama Taha, Rodaina Radwan, mahmoud Abdelaal | United Kingdom

**Abstract:**

**Background :**Omega loop gastric bypass (OLGB) has been viewed with skepticism after the failure of the Bold Mason loop.<sup>1</sup> During the past 15 years, a growing number of authors worldwide approved that OLGB is a safe and effective procedure, which appears clearly from the operative outcome and long-term follow-up of consecutive cohort studies of patients who underwent OLGB. The aim of this study :is to evaluate the outcomes of OLGB at the bariatric center of our university hospital between 2009 and 2015.

**Methods :**The data of 1520 patients who underwent OLGB from November 2009 to December 2015 at our center were reviewed. Mean age was 37.15 years, mean preoperative BMI was  $46.8 \pm 6.6$  kg/m<sup>2</sup> , mean preoperative weight was  $127.4 \pm 25.3$  kg, and 62.7% were women. Diabetes mellitus (DM) affected 683 (44.9%) of the 1520 patients, whereas 773 of the 1520 patients (50.9%) presented with hypertension. The mean operative time was 35 min.

**Results:** The 1-year postoperative BMI mean decreased to  $29.6 \pm 3.1$  kg/m<sup>2</sup> , and at the 3-year follow-up, it was  $27.5 \pm 3.4$  kg/m<sup>2</sup> . The mean of weight decreased to  $81.3 \pm 16.7$  kg and to  $78.9 \pm 16.9$  kg at the 1-year and the 3- year follow-up, respectively. Mortality rate was 0.1%. Overall complications were 9.3%; 0.8% required reoperations. Early complications were encountered in 50 patients (3.3%), and the late complications rate was (6.1%).

**Conclusions :**

In this study, greater excess weight loss was observed with OLGB which appeared to be a short, simple, low risk, effective, and durable bariatric procedure.

**A17: Efficiency of Cruroplasty as a Treatment of Gastro-Esophageal Reflux Disease in Morbid Obese Patients with Hiatus Hernia during Sleeve-Gastrectomy**

Authors: Ahmed Aosmali, Alaa Abbas Sabry, Youhanna Shohdy Shafik, Ahmed Mohamed Sabry & Andrew Nasr Faris Wanees | United Kingdom

**ABSTRACT**

**Background:** The effect of laparoscopic sleeve gastrectomy (LSG) on gastroesophageal reflux disease (GERD) is controversial. Although concomitant hiatal hernia repair (HHR) at the time of LSG is common and advocated by many, there are few data on the outcomes of GERD symptoms in these patients. The

aim of this study was to evaluate the effect of concomitant HHR on GERD symptoms in morbidly obese patients undergoing LSG.

**Aim of the Work:** To analyse the impact of hiatal hernia repair (HHR) on gastro-oesophageal reflux disease (GERD) in morbidly obese patients with hiatus hernia undergoing laparoscopic sleeve gastrectomy (LSG).

**Patients and Methods:** This is a retrospective cohort study. We collected the data of Patients who underwent lap sleeve gastrectomy with cruroplasty in the same operation in the period between July 2018 and July 2019.

**Results:** Before surgery, symptomatic GERD was present in 14 patients (70%), and HH was diagnosed in 20 patients (100%), HH was diagnosed pre-operatively. The mean follow-up was 6 months. GERD remission occurred in 18 patients (90%). In the remaining 2 patients, antireflux medications were diminished, with complete control of symptoms. HH recurrences developed in 1 patient (10%). "De novo" GERD symptoms developed in 22.9% of the patients undergoing SG alone compared with 0% of patients undergoing SG plus HHR.

**Conclusion:** SG with HHR is feasible and safe, providing good management of GERD in obese patients with reflux symptoms. Small hiatal defects could be underdiagnosed at preoperative endoscopy and/or upper gastrointestinal contrast study. Thus, a careful examination of the crura is always recommended intraoperatively.

**Keywords:** Cruroplasty - Gastro-Esophageal Reflux Disease - Sleeve-Gastrectomy

#### **A18: The Outcomes of Revisional One Anastomosis Gastric Bypass Versus Revisional Roux-en-Y Gastric Bypass After Primary Restrictive Procedures: A Prospective Nonrandomized Comparative Study**

**Authors:** Ahmed Aosmali, Osama Taha, Mahmoud abdelal, Mohamed Alaa, Awny Askany | United Kingdom

**Background:** Failed restrictive procedures are usually managed with conversion to another bariatric procedure. Our aim was to evaluate one -anastomosis gastric bypass (OAGB) as a revisional option for failed restrictive procedures. In addition, we compare the outcomes of OAGB versus Roux-en-Y gastric bypass as a revisional bariatric procedures.

**Material and Methods:** The current series is a prospective study, from May 2009 to December 2016. A total of 348 patients with failed restrictive bariatric operations underwent laparoscopic revisional gastric bypass. Revisional OAGB was performed in 243 patients and revisional Roux- en-Y gastric bypass in 105 patients. The demographic data and outcomes were studied by our multidisciplinary team.

**Result:** By the end of the study, the mean age was 39.3 – 10.3 years with body mass index of 37.5 – 9.2 kg/m<sup>2</sup>. At 2-year follow-up, the overall intractable reflux (Symptom-Severity score questionnaire >4) was significantly higher after revisional OAGB (21.4%). The reflux with scoring ≥4 was significantly higher in the vertical band gastroplasty than laparoscopic adjustable gastric band and laparoscopic gastric sleeve (25.2%, 16.9%, and 14.3%, respectively).

**Conclusion:** Although laparoscopic revisional OAGB is a feasible and safe option after failed restrictive procedures, it has a higher chance of reflux in long-term follow-up.

**Keywords:** Redo, single anastomosis gastric bypass, obesity, reflux

#### **A19: Outcomes of One Anastomosis Gastric Bypass in 472 Diabetic Patients**

**Authors:** Ahmed Aosmali, Osama Taha, Mahmoud Abdelal, Mohamed Alaa, Awny Asklany, Ahmed Aosmali | United Kingdom

**Background :**The positive impact of Roux-en-Y gastric bypass (RYGB) on metabolic syndrome and glycemic control has been proven in obese patients. One anastomosis gastric bypass (OAGB) is a simple, effective and easy to learn procedure. OAGB provides encouraging results for the treatment of diabetes obese patients, but does it have the ability to be an alternative procedure to RYGB in the treatment of these patients .

**The aim of this study:** is to evaluate the outcomes of OAGB on diabetic obese patients at the bariatric centre of our university hospital. By extension, we evaluated the possibility of BMI and the preoperative antidiabetic medication usage to be predictive factors for postoperative diabetes resolution.

**Methods:** This is a retrospective single-centre study of 472 diabetic patients who underwent OAGB from November 2009 to December 2015. All patients were followed-up for at least 1 year, and up to 3 years, where available. Weight, HbA1c, and anti-diabetic medications were recorded at baseline, 3, 6, 12, 24 and 36 months.

**Results :**A total of 472 patients have been followed-up for 1 year and 361 for 3 years. The mean BMI decreased from  $46.8 \pm 7.2$  to  $29.5 \pm 2.8$  kg/m<sup>2</sup> and HbA1c from  $9.6 \pm 1.3$  to  $5.7 \pm 1.5\%$  at the 12-month follow-up. At the 3-year follow-up, the mean BMI was  $32.1 \pm 3.3$  and HbA1c mean was  $5.8 \pm 0.9\%$ . Diabetes remission was achieved by 84.1% of patients.

**Conclusions:** OAGB can be an excellent alternative to RYGB for the treatment of diabetes and obesity. Pre-operative medications may be used to predict postoperative diabetes remission, but not BMI.

**A20: Bariatric surgeries outcomes on geriatric age group a multicenteric retrospective study in Egypt.**

Authors: *Michael Maher Mourad Fahem, Anasimone Zaki, Cathrine Antonious, Mohamed Abdelghani, Peter Ayoub, Ayman Kamal Abdelkhalek | Egypt*

**Introduction:**

Laparoscopic bariatric surgeries (LBS), particularly sleeve gastrectomy, is widely performed globally, comprising 46% of procedures across 51 countries. These surgeries significantly improve health outcomes and obesity-related comorbidities such as hypertension, diabetes, and sleep apnea. Candidates typically have a BMI  $\geq 35$ , or  $\geq 30$  with comorbidities. Outcomes in geriatric patients ( $\geq 60$  years in Egypt) are comparable to adults, with high satisfaction rates.

**Objectives:**

Identification of one-year outcomes after LBS, primary outcomes were their effects on hypertension (HTN), diabetes mellitus (DM), obstructive sleep apnea (OSA) and Gastroesophageal reflux disease(GERD). Meanwhile other outcomes are patients' satisfaction due to surgery as well as psychological issues.

**Methodology:**

Retrospective collection of patients' data from different centers in Egypt, where categorical variables will be summarized using frequencies and percentages. Quantitative variables will be presented as mean(SD) or median(IQR) according to data distribution which was assessed through the shapiro-wilk test. Group comparisons will use the Chi-square test for categorical variables, and the independent t-test for continuous variables.

**Results:**

The study included 61 patients (47 women, 14 men). Procedures performed were Sleeve gastrectomy (47.5%), Single Anastomosis Gastric Bypass (47.5%), and Roux-en-Y gastric bypass (4.9%). Common comorbidities were hypertension (70.5%), diabetes (42.6%), GERD (59%), and OSA (36.1%). At 12 months post-op, remission rates were: hypertension 95.3%, diabetes 96.2%, GERD 91.7%, and OSA 100%—all significantly higher than expected rates in literature ( $p < 0.001$ ). Psychological disorders were present in 24.6% of patients, not significantly different from the expected 18% ( $p = 0.18$ ). BMI decreased significantly (mean reduction:  $15.2 \text{ kg/m}^2$ ,  $p < 0.001$ ). Patient satisfaction was high, with 86.9% satisfied, was significantly above neutral ( $p < .001$ ).

**Conclusions:**

Laparoscopic bariatric surgeries show high satisfaction, especially in geriatric patients,

## **A21: Unlocking the Gut–Brain Connection: Microbiota and Neurohormonal Pathways in Obesity and Bariatric Surgery**

Authors: *Dimitra Peristeri, Hywel Room | UK*

**Background:** Obesity is way more than excess weight—it is a complex, systemic disorder driven by metabolic, inflammatory, and neurohormonal dysregulation. Central to this network is the gut microbiota (GM), which orchestrates energy balance, appetite, and metabolism. Bariatric surgery (BS) offers dramatic weight loss and metabolic improvement, not only by anatomical alteration but by reshaping the GM–gut–brain axis.

**Methods:** We synthesised current evidence from human and experimental studies exploring GM composition in obesity and post-BS, with a focus on neurohormonal mediators, including GLP-1, PYY, and bile acids. Literature was identified via PubMed, Medline and Scopus, with inclusion of translational studies highlighting microbiota-driven metabolic pathways.

**Results:** Obese individuals exhibit reduced microbial diversity, an increased Firmicutes/Bacteroidetes ratio, and depletion of beneficial taxa such as Christensenellaceae, Lactobacillus, Bifidobacteria, and Akkermansia. These changes promote chronic inflammation, insulin resistance, and energy dysregulation. BS induces rapid, profound shifts in GM, enhancing production of short-chain fatty acids, modulating bile acid signalling, and stimulating anorexigenic hormones. The resulting recalibration of the gut–brain axis drives sustained appetite suppression, improved glucose homeostasis, and durable weight loss. Novel microbiota-targeted strategies—including prebiotics, probiotics, and faecal transplantation—show promise as adjuncts to surgery, particularly in patients with incomplete metabolic response.

**Conclusions:** The GM-neurohormonal interface is a master regulator of obesity and post-surgical metabolic recovery. By decoding this axis, we can move beyond one-size-fits-all interventions toward personalised, microbiota-informed strategies, blending surgery, nutrition, and pharmacology. Harnessing the gut–brain dialogue may redefine obesity treatment and open new horizons for precision metabolic medicine.

## **A22: Revision bariatric surgery following laparoscopic sleeve gastrectomy(LAG)and laparoscopic greater curvature plication (LGCP):technical difficulties.**

Authors: *Osama Alabid, Haida salih | Iraq*

### **Abstract**

**Background** LSG and LGCP both are restrictive bariatric operations used to treat obesity, however they may require revision procedures for weight regain, food intolerance, GERD or other reasons. Two types of these revisions surgery are Reux-en-Y gastric bypass (RYGB) and one anastomosis gastric bypass (OAGB). The aim of this study is to compare the technical difficulties for these revision surgeries after both LSG and LGCP.

**Method** Out of the 37 patients included in this study; 24 cases were related to LSG conversion, 11 of them were converted to RYGB and 13 were converted to OAGB. As for the 13 LGCP conversions, 5 cases were converted to RYGB, and 8 cases were converted to OAGB. The intraoperative technical difficulties between converting LSG/LGCP to RYGB or OAGB were compared by taking the operative time, adhesion, bleeding, partial resection of remanent stomach and hospital stay as comparative metrics.

**Results** The average operative time for conversion of LGCP to RYGP or OAGB was 190 minutes and 140 minutes respectively; as for LSG conversion, the average time was 110 minutes for RYGB and 78 minutes for OAGB conversions. Adhesion around the stomach was more in cases of LGCP than in cases of LSG. As for estimated blood loss, no case required blood transfusion. 3 cases in LGCP required partial resection of remanent stomach, which was not required for any LSG case. Additionally, 2 LGCP cases required more than one day hospital stay, while only 1 LSG case required that.

**Conclusion** Both LSG and LGCP may require revision surgery; however, LGCP operations are more difficult and require higher skills when compared to LSG operations.

#### **A23: Evaluation of One Anastomosis Gastric Bypass with Modified Fundoplication Using the Excluded Stomach as a Novel Antireflux Technique**

Authors: *Mostafa Mahran, Reem Salah, Haitham Elmaleh, Osama Fouad | UK/Egypt*

##### **Objectives:**

To evaluate the feasibility, safety, and efficacy of combining One Anastomosis Gastric Bypass (OAGB) with a novel modified fundoplication using the excluded stomach in the management of obesity associated with gastroesophageal reflux disease (GERD) and/or hiatus hernia.

##### **Methods:**

This prospective randomised comparative study was conducted on 60 patients with obesity and GERD and/or hiatus hernia. Participants were randomly assigned into two equal groups: Group A underwent standard OAGB, and Group B underwent OAGB combined with modified fundoplication. All patients were assessed preoperatively using upper gastrointestinal endoscopy and esophageal manometry. Postoperative outcomes included



GERD symptoms assessed by the GERD-HRQL questionnaire, VISICK score, PPI dependency, weight loss, operative time, and complications. Follow-up was conducted over a 24-month period.

#### **Results:**

Both groups showed similar excess weight loss percentages at 6, 12, and 24 months, with no significant difference ( $p > 0.05$ ). The OAGB + fundoplication group showed significantly lower postoperative VISICK scores (median 2 vs. 4,  $p < 0.001$ ) and reduced PPI usage duration ( $p = 0.00014$ ). Manometric findings at two years post-op showed increased LES high-pressure zones in the fundoplication group (56.6% vs. 0%) and improved LES relaxation (23.3% vs. 13.3%). There was a slight increase in dysphagia in the fundoplication group, requiring careful patient selection.

#### **Conclusion:**

Overall, OAGB with modified fundoplication appears to be a feasible, safe, and effective alternative to conventional OAGB for patients with obesity, GERD, and/or hiatus hernia, reducing the need for long-term GERD management and potentially avoiding more invasive procedures like Roux-en-Y conversion.

### **A24: Analysis of the Supportive Care Needs after bariatric surgery in Germany using an adjusted Supportive Care Needs Survey- Short Form (SCNS SF34)**

**Authors:** Jonas Wagner, Madita Roll, Anne Lautenbach, Sara Notz, Gabriel Plitzko, Jakob Izwicki, Oliver Mann, Thilo Hackert, Anna Dupréé, Freya Brodersen, Angelika Weigel | Germany

#### **Objectives**

Currently, bariatric surgery is the most effective treatment for patients with obesity.

While lifelong follow-up care is recommended to support long-term outcomes, follow-up attendance remains suboptimal. The reasons for this are not yet fully understood.

This study aimed to assess unmet supportive care needs in patients following bariatric surgery using the SCNS-SF34, with the goal of identifying patients' needs to improve engagement in long-term follow-up care.

#### **Methods**

Patients who had undergone bariatric surgery at a university medical center and attended at least one follow-up appointment were invited to complete an adjusted SCNS-SF34 questionnaire online.

#### **Results**

A total of 327 patients were contacted, of whom 260 participated in the study, yielding a participation rate of 79.5%. Overall, reported needs were low, with mean scores ranging from 17.3 for physical and daily living needs to 26.1 for health system and information needs. Notably, health system and information needs scored significantly higher than all other categories. A trend toward increasing need scores across all domains was observed during the first three postoperative years. Additionally, patients with high unmet needs were significantly shorter, had lower body weight, and were more frequently female.

### Conclusion

Needs assessment using a modified version of the SCNS-SF34 revealed generally low levels of unmet supportive care needs among patients after bariatric surgery. The highest scores were observed in the domain of health system and information needs. Improving patient education and communication regarding follow-up care may help enhance long-term adherence. Female patients more frequently reported high levels of need and may benefit from more individualized follow-up strategies.

### **A25: Surgical weight loss strategies and outcomes after eroded Gastric Band , 2025 updates**

Authors: *Ibrahim Abdelhamid Hassan, Mohammad Barak Alhaiifi | Kuwait*

History of Gastric Bands:-

- Non Adjustable Bands :1970+
- Adjustable Bands:- 1980+
- The use of bands had increased and got popularity since 2000+
- First band in Kuwait 1999
- After 2010 started to decline gradually

WHY BANDS HAD LOST POPULARITY:

- Poor weight loss compared to SG/GBP/MGB
- Long term complications(up to 52%)
- Long term Reoperation (66.1%)
- EROSION(1.6%-3%).**
- Other complications:
  - Port and tube disconnection
  - Port infection/Abscess
  - Band slippage
  - Proximal dilatation

**BAND EROSION:-**

**Mostly due to Gastric wall ischaemia and necrosis due to chronic over inflation.**

C/P:-variable

-Asymptomatic

-Loss of restrictive effect(wt regain)

-Epigastric pain

-Recurrent port infection

-Reflux/regurgitation

-Fever/vomiting

-Back pain/splenic abscess

**WHAT HELP TO DIAGNOSE:-**

-CLINICAL SUSPISION(A-B-C)

-CT WITH ORAL CONTRAST

-GASTROSCOPY

**CAN BE REMOVED BY :**

-ENDOSCOPY

-LAPAROSCOPY

-HYBRID

**WHAT IS NEXT:-**

-NO Revisional surgery at time of removal of eroded band

-wait for 3-6 months

-improve nutritional status-counsel patient for non surgical options

- In some cases: revision can be done (early diagnosed/good general condition/healthy fundus,....)

**WHY REVISION IS CHALLENGING:-**

-SEVERITY OF EROSION

-DEGREE OF FIBROSIS

-ISCHAEMIC GASTRIC POUCH(IMPAIRED VASCULARITY)

-STOMACH BED ABSCESS/INFLAMMATION

**MDT ASSESSMENT BEFORE DECIDING REVISION**

full labs/barium study/oesophageal manometry/gastroscopy/Contrast CT/Dietary assessment/....



#### **SURGICAL OPTIONS:-**

- LSG
- GBP
- MGB
- BPD/BIPARTITION
- REBANDING !!!

#### **USE OF ICG/Robotic MIGHT HELP:-**

##### **(INDOCYANINE INJECTION)**

- Improves Visualization of Tissues Vascularity
- Enhances intraoperative decision-making
- Reduces the risk of postoperative leaks and strictures
- Assists in confirming adequate vascularization before completing an anastomosis or staple line

#### **3 high volume centers experience in Kuwait:**

##### **-14 yrs/3 centers registries:**

- over 14 years attended 15000+ Bariatric cases/3 centers
- LGB as a 1ry bariatric procedure incidence : less than 1%
- Erosion had been seen in 3 cases
- 30 yrs old lady/BMI 32/1ry inserted band 10 yrs ago
- Presented on 2021 with on/off mild abdominal pains/Reflux
- No medical comorbidities/Good general condition
- Gastroscopy then DL&BR

#### **(link for video):**

#### **Conclusion:**

Band erosion is an uncommon complication of gastric banding, removal is a must once diagnosed, revisional surgery is challenging and outcomes need MDT approach and meticulous decision making.

#### **A26: Intraoperative Indocyanine Green Fluorescence in Bariatric Surgery: Current Evidence and Clinical Applications.**

Authors: *Dimitra Peristeri, Sai Sandeep Singh Rowdhwal | UK*

**Background:** Anastomotic leak (AL) remains one of the most serious and challenging complications following bariatric surgery, with a significant impact on patient outcomes. Indocyanine green (ICG) fluorescence imaging provides a real-time intraoperative method of assessing tissue perfusion and viability. Although increasingly applied in gastrointestinal surgery, its role in bariatric procedures remains uncertain. This review sought to summarise the available evidence on the intraoperative

application of ICG in bariatric surgery and its potential to lower AL risk.

**Methods:** A comprehensive search of PubMed, MEDLINE, EMBASE, Scopus, and the Cochrane Library was conducted up to December 2024. Eligible studies were those evaluating ICG use during bariatric operations with specific reference to anastomotic leak prevention or detection.

**Results:** Eleven studies met the inclusion criteria, incorporating 887 patients in total. Of these, 643 patients underwent ICG-guided intraoperative perfusion assessment, while 244 served as controls. The mean patient age was 43.8 years, and the average BMI was 43.3 kg/m<sup>2</sup>. Procedures included a range of bariatric operations. ICG was administered as a standalone technique in most studies, though combined with methylene blue in one. Administration protocols varied considerably between studies. No adverse events related to ICG were reported. Importantly, ICG altered intraoperative decision-making in approximately 4.2% of cases.

**Conclusions:** Intraoperative ICG fluorescence appears to be a safe and useful adjunct in bariatric surgery, potentially aiding in the prevention and early management of anastomotic leaks. Further high-quality, randomised controlled trials are warranted to establish standardised protocols and to define its role in both primary and revisional bariatric procedures.

## A27: Ethical Considerations in Bariatric Tourism: A Qualitative Study of UK Patients with Postoperative Complications Abroad

Authors: *Gwennan Shewring* | United Kingdom

**Background:** Despite being an effective intervention for severe obesity, access to bariatric surgery in the UK is constrained. Waiting lists are extensive, and private surgery is financially prohibitive for most patients, leaving many with few viable options. These barriers have contributed to a growing phenomenon

of bariatric tourism to clinics where surgery appears affordable, marketed into all inclusive packages. This trend has given rise to escalating concerns, with the BOMSS and UK Foreign Office warning of significant risks. Despite this, little is known about the lived experiences of UK patients or the perspectives of NHS clinicians who manage complications on their return.

**Aim:** The study examines the experience of UK patients who underwent bariatric surgery abroad and NHS clinicians managing similar patients. It seeks to explore the ethics of bariatric tourism, such as autonomy, informed consent, harm, and justice.

**Methods:** Semi-structured interviews were conducted with five patients who underwent bariatric surgery

in Türkiye between 2017 and 2024, and three NHS physicians (A&E consultant, consultant general surgeon, and GP) who had treated similar cases. Data was analysed thematically using Braun and Clarke's

framework.

**Results:** Analysis revealed four themes: (1) Compromised Autonomy: ill health, financial pressure and persuasive marketing places significant pressure onto patients (2) Informed Consent: consent processes were superficial or obstructed by language barriers; (3) Harm/ Psychological Impact: patients were left with chronic health deficits and profound emotional distress; and (4) Justice/ Resource Allocation: strain on NHS resources upon return to domestic systems and subsequent inequities in access.

**Conclusion:** Some unregulated bariatric tourism practices raise ethical challenges. Patients' autonomy and consent were undermined, harms extended beyond the physical to long-lasting psychological harm, and the NHS bore substantial resource burdens. To mitigate harms, reforms are urgently required, including expanded domestic access to bariatric services, regulation of marketing practices, and enhanced public health strategies.

#### **A28: SASI Bypass Is Comparable to OAGB for Weight Loss and Metabolic Outcomes: Evidence from a Systematic Review and Meta-Analysis**

Authors: *Mohamed Elfakharany, Mohamed Barghash, Youssef Badie, Matthew Riad, Osama Selim, Mohamed Elatrosh, Omar Ahmed, Khaled Mohamed, Ahmad Othman, Mohamed Elshaear, Ahmed Abdelsamad* | United Kingdom

#### **Abstract**

#### **Objectives**

This is a systematic review and meta-analysis that aims to compare Single-anastomosis sleeve-ileal (SASI) bypass and one-anastomosis gastric bypass (OAGB) for patients suffering from morbid obesity in terms of safety and efficacy.

#### **Methods**

We searched the major databases, including PubMed, Scopus, and Web of Science, up to July 2025, for studies comparing SASI and OAGB in adults with obesity. The primary outcomes included the procedure's efficacy as reflected by the percentages of total weight loss (%TWL), excess weight loss (%EWL), excess body mass index loss (%EBMIL) and changes in the body mass index (BMI) at 6, 12, and (where available) 24 months. Secondary outcomes included the effect on type 2 diabetes (T2DM), hypertension, gastro-oesophageal reflux disease (GORD), nutritional indices, and complications. Risk of bias was assessed using the Newcastle–Ottawa Scale for cohort studies and risk of bias (RoB-2) for randomised trials. A random-effect model was applied.

## Results

Fifteen studies met the inclusion criteria. There was no statistically significant difference between the two procedures in relation to weight loss parameters {TWL (p=0.75 at 6 months; p=0.91 at 12 months), EWL (p=0.81 at 6m; p=0.61 at 12m), and BMI change (p=0.57 at 6m; p=0.30 at 12m)}. Comorbidity outcomes were comparable, including remission of T2DM (p=0.35), hypertension (p=0.32), and GORD improvement (p=0.87); findings for OSA (p=0.21) and dyslipidaemia (p=0.44) were also not significantly different. Nutritional indices at ~1 year showed no significant difference between the Two groups (calcium/vitamin levels p=0.86 and p=0.53; vitamin B12 p=0.29; albumin p=0.59). Operative parameters and complications were similar, including operative time (p=0.75), intraoperative complications (p=0.85), overall postoperative complications (p=0.96), and gastrointestinal symptoms (p=0.18).

## Conclusion

SASI bypass is comparable to OAGB in terms of short- to mid-term outcomes related to weight loss, metabolic disease remission, nutritional outcomes, operative parameters, and safety. Procedure choice may therefore be individualised according to patient profile and surgeon expertise. Longer-term comparative studies are warranted to clarify durability and late adverse events.

### **A29: Changes in Plasma Biomarkers of Glucagon Resistance following Weight Loss: A Systematic Review and Meta-Analysis**

Authors: *Emma Rose McGlone, Hye-Rin Charlotte Kim, Lima Hamidi, Anne Majumdar, Matyas Fehervari, Emma Rose McGlone*

Affiliations: 1Department of Metabolism, Digestion and Reproduction, Imperial College London, 2London North West University Healthcare NHS Trust, 3Dept of Health Studies, Royal Holloway University of London, 4Department of Surgery and Cancer, Imperial College London, 5Department of Bariatric Surgery, Maidstone and Tunbridge Wells NHS Trust

**Background:** Glucagon decreases lipid accumulation in the liver, but resistance to its actions has been reported in people with obesity and metabolic-associated steatotic liver disease (MASLD). Fasting plasma glucagon is a surrogate biomarker of glucagon resistance, yet its response to weight loss remains unclear.

**Objective:** This systematic review and meta-analysis aimed to investigate the effect of weight loss on fasting plasma glucagon and evaluate differences by intervention type.

**Methods:** MEDLINE and Embase were searched for interventional and cohort studies reporting fasting glucagon changes alongside weight loss. Eligible studies included dietary, pharmacological, or surgical interventions of at least four weeks' duration, achieving a minimum of 5% total body weight loss in participants with a BMI  $>25$  kg/m<sup>2</sup>. Random-effects meta-analyses, subgroup analyses, correlation analyses, and meta-regression were performed. Risk of bias was assessed using the Cochrane RoB2 tool for randomised-controlled trials (RCTs) and MINORS tool for non-randomised studies.

**Results:** Forty-seven studies reporting data from 69 interventions (41 surgical, 14 pharmacological, 14 dietary) and a total of 2,061 participants were included in analysis. Pooled weight loss was  $-18.23$  kg (95% CI  $[-20.20, -16.27]$ ). Fasting glucagon decreased by  $-4.05$  pmol/L (95% CI  $[-4.50, -3.60]$ ;  $p < 0.001$ ). Glucagon reduction occurred across all intervention types: surgical  $-3.85$  pmol/L (95% CI  $[-5.48, -2.22]$ ;  $p < 0.0001$ ), dietary  $-2.87$  pmol/L (95% CI  $[-4.20, -1.54]$ ;  $p < 0.0001$ ) and pharmacological  $-5.32$  pmol/L (95% CI  $[-9.85, -0.78]$ ;  $p < 0.0001$ ). Greater weight loss correlated with larger reductions in fasting glucagon (Pearson  $r = 0.3255$ ,  $p = 0.0064$ ). Heterogeneity was high and overall risk of bias was low to moderate.

**Conclusions:** Weight loss was associated with significant reductions in fasting glucagon. Reductions were consistent across surgical, dietary, and pharmacological weight loss interventions. These findings suggest that weight loss may help to restore glucagon signalling.

#### **A30: Laparoscopic Roux-En-Y Gastric Bypass in the setting of Intestinal Malrotation (Video Presentation)**

Authors: *Karin Karam, Rahi Gandhi, Mark Murray, Ameet Patel, Hiba Shanti* | United Kingdom

##### **Background:**

Intestinal malrotation is a congenital anomaly resulting from incomplete rotation and fixation of the midgut during embryonic development. While up to 90% of symptomatic cases are diagnosed in infancy, adult presentation is rare, with an estimated incidence of  $<0.2\%$ . In adults, it is usually identified incidentally on imaging or intraoperatively. Malrotation poses additional technical challenges in abdominal operations, particularly Roux-En-Y Gastric Bypass (RYGB).

##### **Case presentation:**

A 39-year-old female with morbid obesity (129 kg, BMI 44.3 kg/m<sup>2</sup>) and prediabetes was scheduled for laparoscopic RYGB following routine multidisciplinary assessment. After creation of the gastric pouch, the duodenojejunal (DJ) flexure was not visualised in its

expected location. Further exploration revealed variant anatomy consistent with intestinal malrotation: the third part of the duodenum descended posterior to the right colon, with the DJ lying posterolateral to the ileocecal valve. This configuration precluded a tension-free gastrojejunostomy. A complete Ladd's procedure was undertaken to divide the peritoneal bands and broaden the mesenteric base. The colon was repositioned to the left side and the small bowel to the right. A retro-gastric route was required to achieve a tension-free gastrojejunostomy. The jejunoojejunostomy was fashioned in the right upper quadrant, and all mesenteric defects were closed. The procedure was completed without complication, and the patient had an uneventful recovery.

**Conclusion:**

Laparoscopic RYGB can be safely performed in patients with intestinal malrotation, but the procedure is technically challenging. Variant anatomy may necessitate additional mobilisation, a Ladd's procedure, or alternative limb routing. When malrotation is recognised preoperatively or early intraoperatively, sleeve gastrectomy should be considered as an alternative in suitable candidates. RYGB can further increase the complexity of the anatomy in the setting of malrotation, posing additional challenges for future diagnostic and surgical interventions.

**A31: Sleeve Gone Wrong - Synchronous stenosis and RNYGB rescue in two sisters**

Authors: *Fathi Elzowawi, Mohamed Algobbi | Libya*

( A video oral presentation )

**Abstract****Background :**

Laparoscopic Sleeve gastrectomy ( LSG ) is one of the most commonly performed bariatric procedure worldwide , with its safety , yet complication such as sleeve stenosis can lead to morbidity and malnutrition .

Conversion of sleeve to Roux-en-Y gastric bypass ( RNYGB ) remain the gold standard rescue option in sever or refractory cases .

**Methods / case presentation :**

We present two sisters who underwent laparoscopic sleeve gastrectomy LSG on the same day at same center and subsequently developed symptomatic sleeve stenosis within days of surgery

**Case 1**

- 31 years old , female , Presented to our clinic on 13-03-2025 with history of

nausea and vomiting what she eat since 3 months when she underwent sleeve gastrectomy ,on 31-12-2025 , pre operative wight 89kg and her BMI 34.9 pre diabetic . at presentation her weight

Pre operative work up : Ct scan / upper endoscopy reveals : severely stenotic sleeve

## Case 2

- 44 years old , female , known of hypothyroidism , after we operate her sister came to us with same complain, when she underwent laparoscopic sleeve gastrectomy with her sister , pre operative wight 105kg , her bmi .

At presntation her wight 76Kg , BMI 29m

Pre operative workup reveals : sleeve stenosis along with a remnant gastric fundus .

Result / management and outcomes : both patients underwent elective one staged laparoscopic conversion from LSG to RNYGB

Patient were discharged on postoperative days 3 ,postoperatively , both patients experienced complete symptomatic relief and had no complications . at 6 months of follow up , both sisters reported complete resolution of obstructive symptoms and with weight loss maintained .

**Conclusion :** this rare occurrence of synchronous sleeve stenosis in two sisters ,highlighting using small sized calibration tube . familial or genetic predisposition . RNYGB remains the most effective and reliable revisional option for sleeve stenosis providing symptom resolution and durable weight loss .

## A32: Laparoscopic Revision of Gastrojejunal (GJ) Stricture Following Roux-en-Y Gastric Bypass (RYGB): A Case Report and Surgical Video

Authors: Ece Aksu, Shanmuga Kannan, Arkeliana Tase, Periyathambi Jambulingam | England

### BACKGROUND

Roux-en-Y gastric bypass (RYGB) is widely performed for class III (morbid) obesity, with a well-characterised, comparatively low late-complication burden. Gastrojejunal (GJ) anastomotic stricture is one of the long-term complications, typically presenting with progressive dysphagia. While most cases are treated with endoscopic dilatation, recurrent or fibrotic strictures may require surgical revision.

### CASE PRESENTATION

A 59-year-old male with a history of RYGB in 2018 presented with progressive dysphagia to solids and viscous liquids. Endoscopy and barium swallow demonstrated a GJ anastomotic stricture with associated ulceration. He underwent

three endoscopic balloon dilatations over eight months, with only temporary relief. He stopped smoking one year prior to surgery, and his weight increased from 76.35 kg (BMI 22.0) in April 2024 to 82.2 kg (BMI 24.3) by June 2025. As symptoms recurred, he underwent laparoscopic resection of the stricture and gastric pouch with oesophagojejunostomy and repair of hiatus hernia in July 2025. Key steps in procedure included lysis of dense adhesions, complete dissection and repair of the hiatus hernia, resection of the stricture, and reconstruction with OJ anastomosis using a 45mm linear stapler and V-Loc sutures. Following a negative "Ribena" swallow test on day 5, the drain was removed on postoperative day 7 and he was discharged with life-long nutritional supplements and advise to abstain from smoking.

## DISCUSSION

Endoscopic dilatation is effective for benign strictures that are short, non-angulated and non-fibrotic, particularly in the absence of ischaemia, leak or malignancy. Surgical revision should be considered when there is failure of repeated dilatations, severe fibrosis or associated complications such as ulceration, fistula or abscess. Laparoscopic revision of GJ stricture following RYGB is an effective option when surgery is indicated, particularly in the presence of associated anatomical issues such as hiatus hernia. The video demonstrates the technical aspects of safe dissection, stricture resection, and reconstruction.

## **A33: Laparoscopic Revision of Gastrojejunral (GJ) Stricture Following Roux-en-Y Gastric Bypass (RYGB): A Case Report and Surgical Video**

Authors: Ece Aksu, Shanmuga Kannan, Arkeliana Tase, Periyathambi Jambulingam | England

## BACKGROUND

Roux-en-Y gastric bypass (RYGB) is widely performed for class III (morbid) obesity, with a well-characterised, comparatively low late-complication burden. Gastrojejunral (GJ) anastomotic stricture is one of the long-term complications, typically presenting with progressive dysphagia. While most cases are treated with endoscopic dilatation, recurrent or fibrotic strictures may require surgical revision.

## CASE PRESENTATION

A 59-year-old male with a history of RYGB in 2018 presented with progressive dysphagia to solids and viscous liquids. Endoscopy and barium swallow demonstrated a GJ anastomotic stricture with associated ulceration. He underwent three endoscopic balloon dilatations over eight months, with only temporary relief. He stopped smoking one year prior to surgery, and his weight increased from 76.35 kg (BMI 22.0) in April 2024 to 82.2 kg (BMI 24.3) by June 2025. As symptoms recurred, he underwent laparoscopic resection of the stricture and gastric pouch with

oesophagojejunostomy and repair of hiatus hernia in July 2025. Key steps in procedure included lysis of dense adhesions, complete dissection and repair of the hiatus hernia, resection of the stricture, and reconstruction with OJ anastomosis using a 45mm linear stapler and V-Loc sutures. Following a negative "Ribena" swallow test on day 5, the drain was removed on postoperative day 7 and he was discharged with life-long nutritional supplements and advise to abstain from smoking.

## DISCUSSION

Endoscopic dilatation is effective for benign strictures that are short, non-angulated and non-fibrotic, particularly in the absence of ischaemia, leak or malignancy. Surgical revision should be considered when there is failure of repeated dilatations, severe fibrosis or associated complications such as ulceration, fistula or abscess. Laparoscopic revision of GJ stricture following RYGB is an effective option when surgery is indicated, particularly in the presence of associated anatomical issues such as hiatus hernia. The video demonstrates the technical aspects of safe dissection, stricture resection, and reconstruction.

## **A34: Implementing a standardised psychological triage pathway in bariatric surgery: interim findings from a single centre**

**Authors:** *Emily McBride, Ravikrishna Mavidanna, Shakira Hollyfield, Olivia Painter, Cynthia Borg, Kyriacos Shiamtanis, Amina Meho, Midhat Siddiqui*

### **Introduction:**

Bariatric surgery can have suboptimal results due to difficulties in behaviour change and underlying mental health conditions. However, many services lack specialist psychologists, and where available, not all patients undergo assessment. To address this, we implemented a triage pathway using psychometric measures for all new patients in our trust. This initiative aims to assess feasibility, enhance standardisation, and track psychological referral pathways.

### **Methods:**

Since July 2024, new bariatric patients have completed a battery of screening questionnaires, assessing depression, suicide behaviours, binge eating, alcohol and drug misuse, post-traumatic stress disorder, and mental health diagnoses. Based on scores, patients are triaged into low, moderate, or higher-risk categories. Interim analyses used descriptive statistics, with empirical analysis planned upon dataset completion.

### **Results:**

Among the 82 patients recruited to date, 54.8% (n=45) raised no psychological concerns. A further

18.2% (n=15) proceeded to MDT review but were signposted to mental health resources, including talking therapies and binge eating support. Full psychological assessments were recommended for 23.1% (n=19) who scored highly on at least one screening measure. Due to alcohol misuse or active suicide risk, 3.6% (n=3) were not recommended to proceed. Sociodemographic characteristics appeared broadly similar between those without concerns and requiring full assessment.

#### Conclusions:

Interim findings suggest that a standardised triage tool may improve early identification of mental health needs, enhance support access, and aid preoperative optimisation. This approach could provide a feasible solution for services with limited psychological resources, helping to standardise care, reduce inequalities, and improve outcomes for bariatric surgery patients.

### **A37: Utilisation of Transoral Outlet Reduction and Tirzepatide in management of resistant dumping syndrome**

**Authors:** Arkeliana Tase, Mohamed Aly, Anjali Zalin, Md Tanveer Adil, Omer Al-Taan, Farhan Rashid, Osamah Niaz, Othman Al-Fagih, Alan Askari | UK

#### Introduction

Dumping syndrome (DS) and reactive hypoglycaemia (RH) are recognised complications following bariatric surgery, particularly Roux-en-Y gastric bypass (RYGB). We present our early outcomes using transoral outlet reduction endoscopy (TORE) and the dual GLP-1/GIP agonist Tirzepatide in the management of this complex patient group.

#### Methods

Patients presenting with symptoms consistent with DS and RH were placed on a structured clinical pathway. All cases were reviewed within the complex bariatric multidisciplinary team (MDT) prior to treatment initiation. Outcomes of TORE and GLP-1 agonist therapy were evaluated, with data collected on rates of effective treatment and symptom resolution.

#### Results

Management of resistant cases was guided by the MDT, adopting a flexible approach to optimise patient outcomes. TORE has been employed over the past two years, while Tirzepatide has been utilised since January 2025, both with the aim of mechanically or biochemically slowing gastric pouch or sleeve emptying. Our data demonstrate a 66% complete response rate at two years following TORE. Although experience with Tirzepatide is more recent, early results are promising, with 82% of patients reporting symptomatic improvement within 1–2 weeks of initiation.

#### Conclusions

A structured clinical pathway facilitates the effective management of complex cases of DS and RH. The integration of novel interventions, including TORE and GLP-1 receptor

agonists, provides significant clinical benefit. However, barriers to access and funding restrictions for GLP-1 therapies remain important challenges requiring further attention.

### **A38: Iron Deficiency Anaemia Following Bariatric Surgery: A Literature Review of Prevalence, Pathophysiology and Adherence to supplementation**

Authors: *Ece Aksu, Ayaz Mehmood, Arkeliana Tase, Md Tanveer Adil, Vigyan Jain, Farhan Rashid, Periyathmabi Jambulingam, Douglas Whitelaw, Aruna Munasinghe, Alan Askari | England*

#### **Objectives**

Iron deficiency anaemia (IDA) is a common complication following bariatric surgery. Changes in gastrointestinal anatomy impair iron absorption and although prophylactic supplementation is widely recommended, adherence remains suboptimal. This review evaluated reported adherence to iron supplementation and related challenges.

#### **Methods**

We searched PubMed, EBSCO and Cochrane Library for studies published between 2010 and 2025. Included studies focused on adult populations and reported both the rates of IDA and the adherence to iron supplement. We excluded case reports, studies with fewer than 10 participants, and those that did not provide data on IDA. We collected and summarized information on the frequency of iron deficiency, patient adherence to supplement recommendations, the types and doses of supplements used and the primary clinical outcomes.

#### **Results**

Nine studies met the inclusion criteria and included patients who had various types of bariatric surgery. Iron deficiency rates ranged from 6% to 34%, with men having the highest rates. In one study, both ferrous sulfate and heme-iron polypeptide were equally effective in the short term, with approximately 94% - 95% of patients showing improvement after eight weeks. Supplement adherence varied. 37.6% of 340 patients took them regularly, but 23.6% did not take them at all. Patients who took supplements more than 90% of the time had much better iron levels. Those who did not follow the advice had more than twice the risk of iron deficiency. The main reasons for skipping supplements were pill burden, gastrointestinal side effects and difficulty maintaining a consistent routine.

#### **Conclusion**

Persistent iron deficiency after bariatric surgery can often be linked to poor adherence to supplementation. To overcome this, we need improved tools for measuring adherence,

improved patient education and personalised supplementation plans. Future research should focus on new formulations, better delivery options and practical strategies such as behavioural and educational support.

**A39: The impact of psychological trauma on weight loss, psychosocial functioning, and psychopathology in bariatric and metabolic surgery candidates: a systematic review.**

Authors: *Ravikrishna Mamidanna, Shakira Hollyfield, Whitney Scott, Pooja Schmill, Sophia Quirke-McFarlane, Emily McBride | United Kingdom*

Up to 22% of bariatric and metabolic surgery (BMS) candidates experience active psychological trauma symptoms and/or diagnoses (such as post-traumatic stress disorder; PTSD), yet research on its impact on surgical outcomes remains limited. To our knowledge, this is the first systematic review to investigate the effects of pre-surgical active trauma on weight loss, psychosocial functioning, and mental health following BMS.

Five online databases and grey literature were searched from inception to April 2025 for prospective quantitative studies examining adults undergoing BMS with active psychological trauma, defined by clinical diagnosis or self-reported symptoms. Studies had to report associations between pre-surgical trauma and post-surgical outcomes. The Newcastle-Ottawa Scale was used to assess quality. Narrative synthesis and vote counting by effect size was utilised.

Of 3,432 papers screened, 11 observational studies ( $N = 5,543$  participants) met the inclusion criteria, ranging from poor to fair study quality. Findings for PTSD and weight loss outcomes ( $n = 4$ ) were homogenous, indicating that individuals presenting with PTSD tended to have higher postoperative body mass index (BMI) and reduced percentage excess weight loss (%EWL). However, this was not statistically significant in any study. Borderline personality disorder (BPD)/emotionally unstable personality disorder (EUPD) results differed depending on the weight loss parameter. Specifically, BPD/EUPD was associated with higher postoperative weight loss ( $n = 2$ ), though this was only statistically significant in one study.

Despite the high prevalence of trauma in this population, high-quality research on its impact on BMS outcomes is scarce, with methodological heterogeneity further limiting conclusions. Based on the limited evidence in this review, active trauma, including PTSD, does not significantly affect post-surgical weight loss, while findings for BPD/EUPD and adjustment disorders remain unclear. Future research should employ standardized, validated trauma measures, larger samples, and long-term follow-up to establish the effects of active trauma on BMS outcomes.

**A40: Concurrent Bariatric Surgery and Hysterectomy in Endometrial Cancer A Prospective Cohort Study**

**Background:**

Endometrial cancer is the most common gynecologic malignancy in Canada, and obesity markedly worsens both perioperative and oncologic outcomes. Although bariatric surgery provides durable weight loss and comorbidity reduction, it is rarely performed concurrently with cancer surgery. This study evaluated the feasibility, safety, and short-term benefits of combining laparoscopic sleeve gastrectomy (LSG) with total laparoscopic hysterectomy (TLH) and staging for women with obesity and endometrial pathology.

**Methods:**

Women with a body mass index (BMI)  $\geq 35$  scheduled for TLH were prospectively enrolled to undergo TLH alone or TLH + LSG, all performed laparoscopically. Primary outcomes included operative time, estimated blood loss, hemoglobin change, complications, and length of stay. Secondary outcomes at 6 months included BMI, glycemic control, antihypertensive or diabetes medication use, and quality-of-life measures.

**Results:**

Twenty patients were included: 12 underwent TLH + LSG and 8 underwent TLH alone. All procedures were completed laparoscopically with no conversions. Perioperative metrics (including operative time, blood loss, and hemoglobin change) did not differ significantly between groups. Complications occurred in both cohorts: one bowel injury in the TLH-only group, and one intraoperative hemorrhage plus one case of prolonged postoperative nausea in the combined group. All were managed successfully, and no events were directly attributed to the sleeve component. At 6 months, the combined group achieved substantial weight loss, with a mean BMI reduction of approximately  $22 \text{ kg/m}^2$  versus negligible change in the TLH-only group. This translated into improved metabolic outcomes, including reductions in hemoglobin A1C, decreased diabetes medication use, and, in several cases, discontinuation of antihypertensives. No comparable improvements were observed in the TLH-only cohort.

**Conclusion:**

Concurrent TLH + LSG is feasible and safe, with perioperative outcomes comparable to hysterectomy alone. Beyond safety, the combined approach produces clinically meaningful weight loss and early comorbidity improvements, supporting its potential as a novel dual-surgery strategy for women with obesity and endometrial cancer.

**A41: Modern Medicine and Safe Sleeve Gastrectomy: Strategies in Patients who Refuse Blood Products**

1. Grigol Robakidze University ,I Enukidze 3, Tbilisi, Georgia

2.American Hospital Tbilisi,U.Chkheidze 17, Tbilisi, Georgia

### Abstract

**Background:** Sleeve gastrectomy is currently the most common bariatric surgery and is effective for long-term weight loss. However, it carries a bleeding risk of 0.4–4%. For patients who decline blood transfusions, such as Jehovah’s Witnesses, this risk poses unique clinical and ethical challenges.

**Objective:** To explore strategies that allow sleeve gastrectomy to be performed safely without the need for blood transfusion.

**Methods:** A review of the literature on transfusion-free bariatric surgery was conducted, focusing on approaches used before, during, and after surgery to reduce the risk of bleeding.

**Results:** Preoperative optimization with intravenous iron, erythropoietin, and correction of vitamin deficiencies helped increase hemoglobin levels. During surgery, the use of minimally invasive laparoscopic techniques, meticulous control of bleeding with advanced energy devices, staple-line reinforcement, and prophylactic tranexamic acid were effective in limiting blood loss. Postoperatively, careful hemoglobin monitoring, continuation of antifibrinolytics, and early mobilization further supported recovery. Case series (sample sizes between 22–35 patients) reported no mortality, low complication rates ( $\leq 4.5\%$ ), and hospital stays similar to those seen in patients who did not refuse transfusion.

**Conclusion:** With careful planning and structured “bloodless” surgical protocols, sleeve gastrectomy can be performed safely in patients who refuse blood products. Future studies and standardized guidelines are needed to confirm and broaden these findings.

### A42: A Rare Case of Refractory Night-Blindness Post-Bariatric Surgery

Authors: *Manisha Sharma, Adam Goralczyk, Aditi Mudgal, Sukhdeep Sanhotra* | United Kingdom

A 40-year-old Caucasian female presented with a two-year long history of diminished vision in the evening, xanthopsia, paraesthesia and debilitating fatigue, following a laparoscopic sleeve gastrectomy and laparoscopic duodenal switch surgery five and three years ago respectively. The patient was diagnosed with papilloedema, night blindness and glove and stocking neuropathy, despite good compliance with oral multivitamin and mineral

Her indication for surgery was morbid obesity with a body mass index (BMI) of 68.12kg/m<sup>2</sup>, and she had no other medical conditions except for asthma. The patient demonstrated good surgical outcomes, with a 53.1% reduction in body weight four years after her second surgery.

Upon review, she was diagnosed with severe vitamin A deficiency, with a level of less than 0.35μmol/L (normal range 1.05-3.84 μmol/L). Despite treatment with AquADEKs, a fat-soluble preparation of vitamin A, and stepwise increases in dosing up to 40,000 IU oral vitamin A per day, the patient presented 18 months later in A&E with a significantly reduced visual acuity, which had left her wheelchair bound.

Investigations in A&E revealed undetectable blood vitamin A levels, prompting an urgent series of three vitamin A intramuscular injections, a total of 300,000 IU, which resulted in dramatic improvement of vision and detectable levels at 0.49μmol/L.

Therefore, it was concluded that this patient cannot absorb vitamin A orally and will require lifelong parenteral vitamin A administration. Following 4 years of regular vitamin A intramuscular injections, her serum vitamin A levels normalised to 1.30μmol/L, and the patient reported complete resolution of her symptoms.

This case report highlights the severe malabsorptive nature of fat-soluble vitamins, especially vitamin A, in duodenal switch surgery patients, and therefore the importance of long-term biochemical monitoring to achieve good surgical outcomes.

#### **A43: Expanding Bariatric Indications: Retrospective Evidence from Laparoscopic Sleeve Gastrectomy in Class I vs. II-III Obesity**

Authors: *Inyoung Lee, Sungsoo Park* | South Korea

**Objectives:** Metabolic and bariatric surgery (MBS) has traditionally been restricted to BMI ≥35 kg/m<sup>2</sup>, though recent guidelines support extending eligibility to class I obesity (BMI 30-34.9 kg/m<sup>2</sup>). Evidence directly comparing outcomes between low- and high-BMI cohorts remains limited. This study evaluated the efficacy of laparoscopic sleeve gastrectomy (LSG) in patients with class I obesity compared to higher BMI patients (class II-III obesity, BMI 35-50 kg/m<sup>2</sup>).

**Methods:** We retrospectively analyzed obese patients who underwent LSG at a tertiary hospital

in South Korea from 2019 to 2023. Patients were stratified into class I and class II-III obesity. Outcomes evaluated were weight loss results and metabolic disease improvements at baseline and postoperative 6- and 12-months.

**Results:** A total of 85 patients were examined (class I: n=18; class II-III: n=67). At postoperative 12 months, class I patients achieved superior percentage excess weight loss (%EWL) (74.7% vs. 61.1%, p=0.008) and comparable percentage total weight loss (%TWL) (26.6% vs. 28.8%, p=0.252). Among patients with preoperative type 2 diabetes mellitus (T2DM), the proportion who required medications at postoperative 12 months did not show significant difference (63.6% vs. 34.8%, p=0.151) and mean HbA1c values were similar (6.0% vs. 5.7%, p=0.206). Although not statistically significant, higher proportion of patients with preoperative hypertension in class I obesity were able to discontinue their antihypertensive medications (87.5% vs. 54.9%, p=0.125). Early postoperative complications (within 30 days) showed no statistical difference (5.6% vs. 4.5%, p=1.000).

**Conclusion:** LSG in patients with class I obesity achieved superior %EWL, comparable %TWL, and outstanding metabolic outcomes with similar safety profiles. These findings reinforce recent international guidelines supporting expansion of MBS indication to BMI 30-34.9 kg/m<sup>2</sup>. Future long-term, prospective studies are needed to validate these results and guide clinical practice.

**A44: Laboratory indicators of ketonemic syndrome in nonalcoholic steatohepatitis after laparoscopic sleeve gastrectomy**

Authors: Oybek Sattarov, Sattarov O.T., Tukhtaev D.A., Khakimov I.A., Fayziev S.I. | Узбекистан

**Purpose:** To identify laboratory manifestations of nonalcoholic steatohepatitis (NASH) in the form of ketonemic syndrome in obese patients after laparoscopic sleeve gastrectomy (LSG).  
**Materials and Methods:** A total of 257 obese patients who underwent LSG were analyzed. Patients were divided into three groups: control — obese without NAFLD (n=94, BMI  $39.05 \pm 7.1$  kg/m<sup>2</sup>), comparison — obese with nonalcoholic fatty hepatosis (n=83, BMI  $42.0 \pm 7.5$  kg/m<sup>2</sup>), and study — obese with NASH (n=80, BMI  $42.4 \pm 8.3$  kg/m<sup>2</sup>). Assessment included ketone body concentration in exhaled air condensate, blood, and urine, as well as serum  $\gamma$ -glutamyl transpeptidase (GGT) and alkaline phosphatase (ALP) activity.

**Results:** After LSG, all groups demonstrated increased ketone levels, peaking at 1 month postoperatively. In exhaled condensate, NASH patients showed significantly higher values ( $68.9 \pm 8.91$  ppm) compared with controls ( $21.82 \pm 0.09$  ppm; p<0.05). Serum ketone bodies were also elevated in NASH ( $8.0 \pm 1.18$  mmol/L vs.  $1.48 \pm 0.13$  mmol/L in controls; p<0.05), while hyperketonuria occurred earlier and more intensively in NASH ( $2.32 \pm 0.49$  mmol/L) and fatty

hepatosis ( $1.66 \pm 0.22$  mmol/L) than in controls ( $0.57 \pm 0.09$  mmol/L). Importantly, normalization of ketone levels by 6 months was observed only in controls, whereas in NASH patients hyperketonemia persisted. GGT and ALP activities increased 1.4-fold in NASH patients and remained elevated up to 10 months, indicating prolonged hepatic stress and intensified lipolytic processes.

**Conclusion:** NASH in obese patients after LSG is characterized by sustained hyperketonemia, hyperketonuria, and elevated ketone concentrations in exhaled air, accompanied by prolonged elevation of GGT and ALP. These findings highlight ketonemic syndrome as a key laboratory marker of hepatic functional alterations in the early and intermediate postoperative period after LSG.

#### **A45: Reproductive Age vs Postmenopausal Status: Does Hormonal Background Influence Weight Loss Outcomes After Sleeve Gastrectomy?**

Authors: Yunus Yapalak, Ahmet Şirinocak | Türkiye

#### **OBJECTIVES**

To evaluate whether reproductive age impacts postoperative weight loss success in female patients undergoing sleeve gastrectomy, by comparing total weight loss (TWL) and excess weight loss (EWL) across different age groups.

#### **METHODS**

This retrospective study analyzed data from 875 female patients who underwent laparoscopic sleeve gastrectomy between 2019 and 2024. Patients were divided into two subgroups based on age: reproductive ( $\leq 45$  years) and postmenopausal ( $> 45$  years). Patients with incomplete follow-up or missing anthropometric data were excluded. The primary outcomes were %TWL and %EWL at 12 months postoperatively. Mean values were compared using independent-sample t-tests, and statistical significance was set at  $p < 0.05$ .

#### **RESULTS**

A total of 702 patients were in the reproductive group and 173 in the postmenopausal group. Mean age was  $33.6 \pm 6.2$  and  $51.5 \pm 4.8$  years, respectively. Both groups achieved substantial weight loss at 1 year:

- %TWL: 66.2% (reproductive) vs 69.1% (postmenopausal),  $p = 0.455$
- %EWL: 192.8% (reproductive) vs 208.2% (postmenopausal),  $p = 0.293$

Although postmenopausal patients had slightly higher weight loss outcomes, the differences were not statistically significant.

## CONCLUSION

This real-world cohort suggests that reproductive status does not significantly influence 1-year weight loss outcomes after sleeve gastrectomy. Despite hormonal differences, both reproductive and postmenopausal female patients achieve comparably effective weight loss. Further prospective studies including hormonal markers may provide deeper insights into age-related metabolic responses to bariatric surgery.

### **A46: Unexpected Chemical Pathology Leading to Excess Weight Regain Post-Bariatric Surgery.**

Authors: *Manisha Sharma, Miss Aditi Mudgal, Sukhdeep Sanhotra, Sanjay Agrawal* | United Kingdom

**Objectives:** To demonstrate the role of new medical conditions appearing in the post-operative period which can lead to weight regain post-bariatric surgery.

**Methods:** Electronic patient records were accessed for case details, under the guidance of consultant chemical pathologist

**Results:** A 28-year-old Black-Caribbean lady presented with excess weight regain, tiredness, bloating, hip arthralgia, plantar fasciitis, 8 years post Roux-en-Y Gastric bypass surgery. Her pre-surgery BMI was 39kg/m<sup>2</sup> (96kg), and the patient had lost more than 45% excess weight in 2 years post-surgery (61.4kg) but started regaining weight and reached 86kg. The patient was diligent with her dietary and lifestyle modifications post-surgery.

Coeliac disease was ruled out and patient was found to have SIBO which failed to respond to treatment with Doxycycline. The patient was treated for vitamin D deficiency and secondary hyperparathyroidism without any improvement in her musculoskeletal pains which limited her mobility. Patient had Mirena coil for many years and she reported loss of any pre-menstrual symptoms for some time. Her FSH, LH, Oestradiol and AMH levels were in menopausal range in her late 20s confirming Primary ovarian failure (POI).

She was referred to Gynae/fertility, CVD risk modification and Rheumatology clinics and was initiated on HRT, testosterone gel, statins due to POI related increased CVD and MSK symptoms which responded to treatment, improving her tiredness, mobility and the patient has been successful in losing weight now, which also aided by Mounjaro for a brief period.

**Conclusion:** This case demonstrated that patients with weight regain post bariatric

surgery should be extensively investigated and treated for any other new medical pathologies using a multidisciplinary approach. This can help to maintain bariatric surgery related excess weight loss and associated health benefits.

#### **A47: A Rare Case of Refractory Night-Blindness Post-Bariatric Surgery**

Authors: *Manisha Sharma, Aditi Mudgal, Sukhdeep Sanhotra, Adam Goralczyk | United Kingdom*

**Objectives:** To demonstrate the potential need for lifelong, high-dose, parenteral vitamin supplementation after duodenal switch surgery.

**Methods:** Electronic patient records were accessed for case details, under the guidance of a consultant chemical pathologist at Homerton University Hospital.

**Results:** A 40-year-old Caucasian female presented with a two-year long history of diminished vision in the evening, xanthopsia, paraesthesia and debilitating fatigue, following a laparoscopic sleeve gastrectomy and laparoscopic duodenal switch surgery five and three years ago respectively. The patient was diagnosed with papilloedema, night blindness and glove and stocking neuropathy, despite good compliance with oral multivitamin and mineral supplements.

Her indication for surgery was morbid obesity with a body mass index (BMI) of 68.12kg/m<sup>2</sup>, and she had no other medical conditions except for asthma. The patient demonstrated good surgical outcomes, with a 53.1% reduction in body weight four years after her second surgery.

Upon review, she was diagnosed with severe vitamin A deficiency, with a level of less than

0.35 $\mu$ mol/L (normal range 1.05-3.84  $\mu$ mol/L). Despite treatment with AquADEKs, a fat-soluble preparation of vitamin A, and stepwise increases in dosing up to 40,000 IU oral

vitamin A per day, the patient presented 18 months later in A&E with a significantly reduced visual acuity, which had left her wheelchair bound.

Investigations in A&E revealed undetectable blood vitamin A levels, prompting an urgent series of three vitamin A intramuscular injections, a total of 300,000 IU, which resulted in dramatic improvement of vision and detectable levels at 0.49 $\mu$ mol/L.

Therefore, it was concluded that this patient cannot absorb vitamin A orally and will require lifelong parenteral vitamin A administration. Following 4 years of regular vitamin A intramuscular injections, her serum vitamin A levels normalised to 1.30 $\mu$ mol/L, and the patient reported complete resolution of her symptoms.

**Conclusion:** This case report highlights the severe malabsorptive nature of fat-soluble vitamins, especially vitamin A, in duodenal switch surgery patients, and therefore the

**A48: Venous Thromboembolism and Metabolic and Bariatric Surgery: a Case-Informed Literature Review**

Authors: *Inyoung Lee, Sungsoo Park* | South Korea

**Objectives:** Venous thromboembolism (VTE) remains the leading cause of early mortality in metabolic and bariatric surgery (MBS) patients. While most VTE events involve deep vein thrombosis (DVT) or pulmonary embolism (PE), porto-splenic-mesenteric venous thrombosis (PSMVT) is a rare but potentially fatal complication, with an incidence around 0.3%. We aimed to synthesize recent evidence on risk factors and management of VTE after MBS and to illustrate clinical implications through institutional case experience.

**Methods:** We performed a narrative review of published guidelines, studies, and case reports of VTE associated with MBS, focusing on incidence, risk factors, clinical presentations, diagnostic methods, management strategies, and prophylaxis protocols.

**Results:** VTE symptoms include unilateral leg swelling and pain (DVT), sudden dyspnea and chest pain (PE), and abdominal pain and fever (PSMVT). Most VTE events occur post-discharge (80% of cases within 15-22 days), emphasizing the importance of extended prophylaxis. Significant risk factors include obesity, malignancy history, type 2 diabetes mellitus, use of estrogen-based hormonal therapy, male sex, and smoking. Standard thromboprophylaxis with low-molecular-weight heparin (LMWH) reduces VTE risk, but may be insufficient for high-risk patients. Conservative anticoagulation management succeeds in 93.4% of PSMVT cases while surgical interventions are required for some (about 25%). At our institution, we had two referred cases of PSMVT that developed within 2 weeks after laparoscopic sleeve gastrectomy at another hospital. Both had history of hormonal therapy and were successfully treated using anticoagulation, with one requiring thrombectomy.

**Conclusion:** VTE remains one of the most serious complications following MBS. While standard prophylaxis effectively reduces overall VTE incidence, early recognition and personalized risk stratification are critical and extended post-discharge anticoagulation for high-risk patients should be actively considered. Future multicenter prospective studies are warranted to further define optimal VTE prevention and management strategies.

**A49: Five-year experience with same day discharge in bariatric surgery**

Authors: *Alexis Sudlow, Arkeliana Tase, Md Tanveer Adil, Vigyan Jain, Farhan Rashid, Periyathambi Jambulingam, Douglas Whitelaw, Aruna Munasinghe, Omer Al-Taan, Alan Askari* | United Kingdom

## Abstract

### Objectives

There is growing interest in the adoption of a same day discharge (SDD) pathway across the UK given the potential benefits to both patients and healthcare systems. The objective of this 5 year retrospective analysis of patients included in the SDD pathway was to examine the outcomes and identify actors which contribute to successful implementation.

### Methods:

Patients undergoing elective primary bariatric surgery on the SDD pathway were retrospectively analysed between October 2019 and December 2024. The inclusion criteria for SDD included: age < 65 years, BMI < 65 kg/m<sup>2</sup>, local residence, full mobility, and surgery by a consultant or post-CCT fellow. The inclusion criteria was set by our multidisciplinary team (MDT) based on an approved protocol.

### Results:

Over the 5 year study period, 238 patients met the eligibility criteria for SDD (86.1% female, median age 41, median BMI 45.7 kg/m<sup>2</sup>, 71% Roux en Y gastric bypass). Overall, 124 patients (52.1%) were discharged on the same day with SDD rates improving significantly over time (OR 1.26 per year; 95% CI 1.04–1.53; p = 0.018). The 30-day readmission rate was 10.9%, with the primary issues being nausea, dehydration or pain. The most common reasons for not being discharged on the same day were nausea/dizziness (13.4%), logistical delays (10.1%), medical concerns (8.8%) and 2.1% due to social factors.

### Conclusion:

Same-day discharge following bariatric surgery is safe and feasible in appropriately selected patients. MDT-led pathways, consistent follow-up, patient preparation and willingness to adapt are essential to improve discharge success and ensure safe implementation. The identification of factors which resulted in an overnight stay is essential in implementing changes to the pathway to improve SDD rates.

## A50: Comparative Case Study of Preclinical Versus Clinical Obesity: Impact on Bariatric and Metabolic Surgery Pathways

Authors: *Grishma Pradip, Francesco Rubino* | United Kingdom

**Introduction:**

Obesity is a heterogeneous, progressive condition ranging from asymptomatic excess adiposity (preclinical) to multisystem clinical disease; metabolic and bariatric surgery (MBS) is the most effective durable treatment for severe obesity and its complications.

**Aim**

To compare two class 3 obesity cases - one labelled preclinical and one with established clinical disease - and to discuss contemporary evidence and implication for bariatric and metabolic surgery decision making.

**Method:**

Concise case comparison using provided demographics, co-morbidities and medications. Literature synthesis focused on perioperative risk in very high BMI ( $>50$  kg/m<sup>2</sup>), MBS effects on type 2 diabetes and kidney disease and implications of contemporary weight loss pharmacotherapy for surgical pathways. Key, recent guideline and outcome were studied.

**Findings:**

Preclinical case: 34M, BMI 51 kg/m<sup>2</sup>, weight 183 kg, no metabolic medications, single thrombolytic history. Clinical case 44M, BMI 57.5 kg/m<sup>2</sup>, weight 160kg, T2DM with insulin, OSA, diabetic maculopathy, CKD stage 5 - representing advanced end-organ disease.

Higher baseline BMI confers increased perioperative morbidity but does not preclude benefit: staged or optimised pathways (prehabilitation, AOMs) can reduce risk. MBS produces superior and durable weight loss and greater T2DM remission compared with medical/lifestyle care, and observed data show improved kidney outcomes and increased candidacy in ESKD.

**Conclusion**

These contrasting cases illustrate strategic differences: early (preclinical) severe obesity offers an opportunity for less complex optimisation and consideration of early metabolic surgery to prevent progress: advanced clinical obesity with multimorbidity required individualised risk-stratified optimisation (cardio-renal assessment, perioperative planning, possible nephrology/transplant pathway co-ordination). Integration of pharmacologic weight-loss agents as bridging therapy and current guideline expansions for metabolic indications should inform multidisciplinary pathways. Patient-centred shared decision-making and centre expertise remain critical.

**Objectives:** Bariatric surgery is a critical intervention for severe obesity, yet postoperative exercise regimens tailored to this population remain underexplored. This study introduces a novel 16-week exercise program based on the FITT-VP (Frequency, Intensity, Time, Type, Volume, Progression) framework, designed specifically for bariatric patients to enhance recovery and long-term health outcomes.

**Methods:** The proposed exercise protocol, initiated 1 month post-surgery, comprises three progressive phases: resistance (weeks 1-4), hypertrophy (weeks 5-10), and strength (weeks 11-16). The program integrates aerobic and resistance training tailored to the unique needs of bariatric patients. A randomized trial of post-bariatric surgery patients (n=XX) was assessed for strength, muscle mass, systemic inflammatory index, quality of life (QoL), hormonal profile, and body composition pre- and post-intervention. The exercise protocol was developed following observations that patients declined to initiate exercise 17 months post-surgery, highlighting the need for early intervention.

**Results:** Preliminary findings indicate significant improvements in muscle strength ( $p<0.05$ ), lean muscle mass ( $p<0.05$ ), and body composition, including reduced fat mass ( $p<0.01$ ). The systemic inflammatory index decreased, reflecting reduced chronic inflammation ( $p<0.05$ ). Participants reported enhanced QoL scores ( $p<0.01$ ) and favorable changes in hormonal profiles, including improved insulin sensitivity and cortisol levels ( $p<0.05$ ). Adherence to the early intervention (1-month post-surgery) was higher compared to delayed initiation attempts at 17 months post-surgery.

**Conclusion:** This 16-week FITT-VP-based exercise program initiated 1 month post-bariatric surgery demonstrates significant benefits in strength, muscle mass, systemic inflammation, QoL, hormonal profile, and body composition. Early exercise intervention appears critical for optimizing patient outcomes and adherence. These findings support the integration of structured, phased exercise protocols into post-bariatric care to enhance recovery and long-term health.

Keywords: Bariatric surgery, exercise, FITT-VP, strength, muscle mass, inflammation, quality of life, hormonal profile, body composition

**A52: Improving the SF-BARI Score with a Structured Postoperative Exercise Program: A Randomized Trial after Metabolic and Bariatric Surgery**

Authors: *Cláudia Mendes, Manuel Carvalho, Ana Tique, Jorge Bravo Sandra Martins and Armando Raimundo | Portugal*

**Introduction:** Obesity is a complex and multifaceted condition that can lead to serious health issues. Bariatric surgery, particularly Roux-en-Y gastric bypass (RYGB), is highly effective treatment for severe obesity but may often leads to significant skeletal muscle loss, compromising long-term metabolic outcomes. Structured exercise may mitigate these effects, yet its impact on comprehensive surgical success remains underexplored. This randomized controlled trial evaluated the synergistic effects of a 16-week combined exercise program on the SF-BARI score, a holistic composite measure of weight loss and comorbidity remission, in post-RYGB patients.

**Methods:** Thirty-seven patients (mean age  $46.9 \pm 11.4$  years, BMI  $42.9 \pm 5.14$  kg/m<sup>2</sup>) underwent RYGB and were randomized to a supervised intervention group (IG, n=19) or control group (CG, n=17). The IG completed three 55-minute sessions weekly (aerobic and resistance training) starting one month post-surgery for 16 weeks. Outcomes, including anthropometry, percentage total weight loss (%TWL), SF-BARI score (integrating %TWL and remission of type 2 diabetes mellitus, hypertension, dyslipidemia, and obstructive sleep apnea), and complications, were assessed at 5, 11, and 17 months post-surgery.

**Results:** Both groups achieved substantial weight loss (%TWL: IG 37% vs. CG 32.5% at 17 months,  $p=0.139$ ,  $d=0.506$ ), with no between-group differences in BMI or weight. However, the IG showed superior SF-BARI scores at 5 months ( $104 \pm 13.8$  vs.  $92.3 \pm 12$ ,  $p=0.012$ ,  $d=0.883$ ) and 11 months ( $107 \pm 13.2$  vs.  $96.2 \pm 16.8$ ,  $p=0.032$ ,  $d=0.747$ ), driven by enhanced remission of hypertension (0% vs. 41.2%,  $p=0.002$ ) and dyslipidemia (0% vs. 23.5%,  $p=0.025$ ) at 17 months. Type 2 diabetes mellitus remission was high in both (>94%,  $p=0.935$ ), and effect sizes indicated large clinical benefits in the short-to-medium term.

**Conclusions:** A 16-week combined exercise program post-RYGB significantly improves comprehensive outcomes via the SF-BARI score, enhancing metabolic comorbidity resolution beyond weight loss alone. These findings support integrating supervised exercise into postoperative care to optimize surgical outcomes. Sustained interventions may be needed for long-term gains.

#### **A53: Saliva secretion and self-reported dental health 12 years after Roux-en-Y gastric bypass**

Authors: *Kirsti Kverndokk Bjerkan, Aasne Ask Hyldmo, Siren Nymo, Dag Arne Lihaug Hoff and Jorunn Sandvik | Norway*

Author: Kirsti Kverndokk Bjerkan

**Objective:** Dental problems are frequently reported by patients after bariatric surgery, and the causes are poorly understood. The aim was to examine saliva secretion in patients long-term after Roux-en-Y gastric bypass (RYGB) and explore its relationship to self-reported dental health.

**Methods:** Twelve years after RYGB 171 patients were examined by collecting resting and stimulated saliva flow with pH and buffering ability. After fasting overnight, resting saliva secretion was collected in 15 minutes, followed by stimulated saliva collection for five minutes while chewing paraffin wax. The resting saliva flow was classified as normal ( $>0.1\text{mL/min}$ ) or hyposalivation ( $\leq0.1\text{mL/min}$ ) while stimulated saliva test was normal at ( $>1.0\text{mL/min}$ ) and hyposalivation at ( $\leq1.0\text{mL/min}$ ). The participants also answered a questionnaire on dental health.

**Results:** Mean $\pm$ SD time since RYGB was  $12.3\pm1.1$  years, and age at follow-up  $53.2\pm9.4$  years. BMI at RYGB was  $43.3\pm5.1\text{kg/m}^2$ , and follow-up  $32.6\pm6.1\text{kg/m}^2$ . Resting saliva secretion was  $0.35\pm1.1\text{ml/min}$ , stimulated  $1.6\pm1.9\text{ml/min}$ . 106 (62%) patients had hyposalivation in the resting test and 60 (35%) in the stimulated test.

The stimulated pH was  $7.4\pm0.3$  and buffering ability of the saliva  $7.5\pm3.0$ . pH below the cut-off (pH=6,8) at rest was present in 136 (80%) of the patients while 61 (36%) had below cut-off (pH=7,3) in stimulated state. The buffering ability was below normal (<9) in 118 (69%) of the patients.

Dry mouth was reported by 67 (40%) patients. 74 (43%) of the patients classify their dental health to be bad or very bad and 119 (70%) of the patients had experienced teeth breaking after the operation.

Patients with low stimulated saliva are 2.2 times more likely to report poor dental health compared to their counterparts with normal saliva flow.

**Conclusion:** More than half of the patients have saliva secretion below reference levels at rest. There are more patients suffering from hyposalivation than self-reported dry mouth.

**A54: The effects of a perioperative nurse-led program on self-care, body composition and functional in bariatric surgery patients: A randomized controlled trial**

## Abstract

**Background:** Bariatric surgery is a critical intervention for severe obesity, but long-term success depends on effective self-care practices. Nurse-led case management has emerged as a promising approach to enhance patient outcomes by promoting self-care behaviors, self-efficacy, and quality of life (QoL).

**Objective:** This study evaluates the impact of a nurse-led case management intervention on self-care, self-efficacy for exercise, and QoL in bariatric patients through a randomized controlled trial (RCT).

**Methods:** A total of 40 bariatric patients were randomized into two groups: an intervention group receiving nurse-led case management focused on self-care education and support (n=20) and a control group receiving standard postoperative care (n=20). The intervention included personalized counseling, goal setting, and follow-up over one year. Outcomes measured at baseline and four follow-up time points included self-care behaviors (Self-Care of Bariatric Surgery Scale), self-efficacy for exercise (Exercise Self-Efficacy Scale), and QoL (SF-36 Health Survey).

**Results:** The intervention group demonstrated statistically significant improvements compared to the control group in self-care behaviors ( $p<0.05$ ), self-efficacy for exercise ( $p<0.05$ ), and QoL ( $p<0.05$ ). These findings suggest that nurse-led case management enhances patients' ability to manage their health post-surgery.

**Conclusion:** Nurse-led case management significantly improves self-care, self-efficacy for exercise, and QoL in bariatric patients. These results underscore the value of integrating structured nursing support into perioperative care to optimize long-term outcomes. Further research is needed to explore the sustainability and cost-effectiveness of this intervention.

**Keywords:** Bariatric surgery, self-care, nurse case management, self-efficacy, quality of life, randomized controlled trial

## A55: Long-term outcomes of laparoscopic sleeve gastrectomy on obesity-related health conditions

**Background:** Laparoscopic sleeve gastrectomy (LSG) is a recognised surgical treatment for patients living with obesity. Currently, the National Health Service offers this treatment to individuals with a Body Mass Index (BMI) above 40, or over 35 if diagnosed with obesity-related health condition(s) such as diabetes, hypertension, osteoarthritis and sleep apnoea. This study aimed to present long-term outcomes of LSG efficacy in terms of improvement in or resolution of obesity-related medical conditions.

**Methods:** This is a retrospective study using data collected from patients who underwent LSG in the same hospital in 2016 and 2017. Patients were followed up by telephone at 40-months to assess changes in the management of obesity-related medical conditions. Outcomes were based on adjustments to the number or dose of medical therapies being used and/or full resolution of obesity-related co-morbidities.

**Results:** A total of 76 patients were included in the study, having undergone LSG at our hospital in 2016 and 2017 and providing follow up data. The table below shows the effect of LSG on obesity-related medical conditions after 40-months:

Co-morbidity (number of patients - ALL)	Resolved	Improved	The same	Aggravated
Hypertension (34)	17.6%	-	44.1%	38.2%
Diabetes mellitus (29)	41.4%	-	41.4*	17.2
Osteoarthritis (24)	0	-	100%	-
Sleep apnoea (18)	16.7%	5.6%	72.2%	5.66%
Gastric reflux (20)	10%	15%	15%	60%

**Conclusion:** Overall, LSG has been shown to offer high resolution/improvement rates in bariatric patients with diabetes mellitus. There were mixed outcomes in the hypertensive group and only modest improvement for those suffering with sleep apnoea. Data showed very little improvement in patients with osteoarthritis. On the other hand, gastric reflux is commonly aggravated, which is commonly recognised post-operative side-effect after LSG.

Total word count: 277 (exc title and authors)

**A56: Impact of surgical training on long-term patient outcomes undergoing laparoscopic sleeve gastrectomy**

Authors: *Husayn Diamond Esmail, Aishwarya Ghosh, Omar Khan | UK*

**INTRODUCTION**

Laparoscopic sleeve gastrectomy (LSG) is a commonly practised bariatric procedure to achieve weight loss in the obese population. Surgical outcomes can often be linked to operator experience and training. Our aim was to compare weight loss outcomes between consultants and clinical fellows/surgical trainees undertaking LSG as the lead operator.

**METHODOLOGY**

We conducted a retrospective analysis on patients undergoing LSG between Jan 2016 and Dec 2017, with either a consultant or trainee as the lead operator. Data included patient demographics, co-morbidities and peri-operative details (LOS, length of operating time, complications) in order to minimise bias between the two groups. At 20 months and 40 months, a telephone audit was conducted to calculate EWBL% for each patient, as well as document any complications.

**RESULTS**

76 LSG patients were included; 44 performed by consultants, 32 by trainees. There was no difference in age, gender, pre-operative weight, BMI and number of obesity-related comorbidities between groups.

Operative time (trainee  $105 \pm 10.0$  vs consultant  $91 \pm 18.1$  mins) and length of stay (trainee  $2.6 \pm 0.4$  vs consultant  $2.8 \pm 0.9$  days) were similar between groups. There were 3 complications in the trainee group (intra-abdominal collection requiring drainage, wound infection and hypokalaemia); and 2 in the consultant (wound infection, intra-operative bleeding with ICU admission).

Excess Weight Loss(%) at 2 years was  $55.9\% \pm 7.5\%$  for trainee cases and  $52.4\% \pm 6.7\%$  for consultant cases ( $p=0.49$ ).

Excess Weight Loss(%) at 3.5 years was  $54.9\% \pm 9.9\%$  for trainee cases and  $50.7\% \pm 9.9\%$  for consultant cases ( $p=0.54$ ).

**CONCLUSION**

Overall, our results demonstrate that shorter- and longer-term outcomes of LSG are similar between both groups, regardless of whether the lead operator is the consultant or the trainee. The data suggests weight loss outcomes are comparable, and supports the notion that adequately-supervised trainee-led procedures are a viable method of surgical training.

---

Total word count (exc Title & Authors): 287