

A03. Major Vascular Injury During Laparoscopic Sleeve Gastrectomy

(Case Report)



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INTRODUCTION

Laparoscopic Sleeve Gastrectomy (LSG) had been recognized as the most commonly performed bariatric procedure worldwide .

Major vascular injury during the procedure is a rare life threatening complication that needs an immediate integrated response to avoid possible mortality and serious morbidities .

AIM

Major vascular injury might happen during bariatric surgery .. that needs immediate multidisciplinary response to achieve an integrated decision making and proper management , otherwise mortality or major morbidities might occur even in higher centers.

METHOD

A 26 years old lady with Body mass index (BMI) of 35.5 kg/m² had presented to surgical clinic for bariatric surgery.

After proper counseling and routine preoperative work up that showed normal blood results , Abdominal sonography showed fatty liver and Cholelithiasis.

Patient had been counseled for LSG and Laparoscopic Cholecystectomy .

After induction of Anaesthesia , pneumoperitoneum had been achieved using a verres needle in left upper abdominal quadrant then a 10 mm camera port (bladed trocar) had been inserted two fingers above and to the left of umbilicus .

Once camera inside some fresh blood had been noticed in central abdomen , A quick second 10 mm trocar had been inserted at the left abdominal side to explore the source of bleeding that was mostly from a major vessel due to rapid expansion .

Anaesthesia team was informed immediately to resuscitate and prepare adequate blood and blood products and to keep enough IV lines ready.. Senior surgical team had joined the table and quick midline Laparotomy performed to explore source of bleeding.

Sharp linear cut was identified in the Inferior vena cava (lt wall) , Right Common iliac artery (front and Rt wall).

Compression control done while Anaesthesia team was resuscitating the patient successfully ,, Vascular team had been called from a nearby hospital and joined the table within 30 minutes.. successful repair of injured vessels had been achieved within 45 minutes .

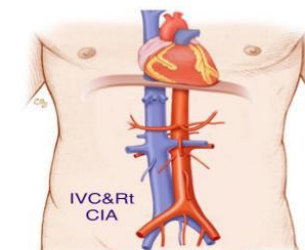
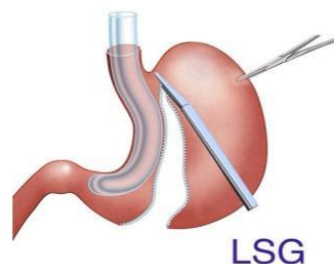
Formal abdominal inspection had been done to rule out any missed injury followed by closure with drains. Patient shifted to surgical ICU ventilated with stable vital signs , adequate urine output and Hb of 12 g following 4 packed blood transfusion .

Follow up Hb was stationary and patient extubated successfully after 12 hours..

Patient had smooth recovery and discharged home after 3 days .

RESULTS / CONCLUSION

Major vascular injury might happen during bariatric surgery .. that needs immediate multidisciplinary response to achieve an integrated decision making and proper management , otherwise mortality or major morbidities might occur even in higher centers.



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Major vascular injury during Bariatric surgery
Acil Cerrahi 2023

ACKNOWLEDGEMENTS

THANKS FOR PROT .SANJAY ARGUAL AND ORGANISING COMMITTEE OF LIBSS

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Reinforcement of the Esophageal Hiatus Using Ligamentum Teres During SG: Outcomes Regarding Gastroesophageal Reflux Disease and Hiatal Hernia

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Introduction

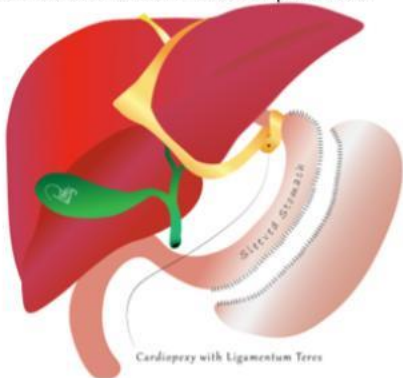
LSG is a surgery that involves removal of 75–80% of the stomach. It offers benefits like less postoperative pain and better recovery compared to open surgery but it also carries the risk of developing GERD and hiatal hernia.

AIM

To evaluate the effectiveness of Ligamentum Teres Reinforcement (LTR) during laparoscopic sleeve gastrectomy (LSG) in reducing postoperative gastroesophageal reflux disease (GERD) symptoms and hiatal hernias. The study compares outcomes between patients undergoing standard LSG and those receiving LTR.

Method

This retrospective study included a group of patients who underwent LSG, divided into two groups: Group A, which contained 30 patients who received LSG without Ligamentum Teres Reinforcement (LTR), and Group B, with 30 patients, who underwent LSG with the additional LTR procedure.

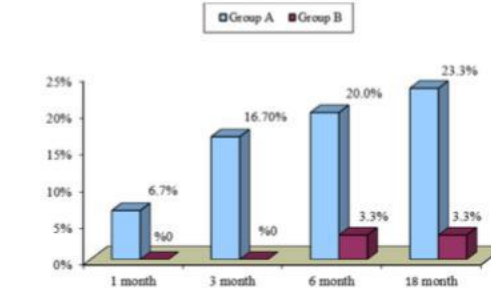


Results

Group A experienced more postoperative reflux symptoms than Group B over time, with significant differences emerging at 3, 9, and 18 months. Endoscopic observations at 6 and 18 months confirmed higher reflux rates in Group A (26.7% and 30%) compared to Group B (3.3% and 6.7%), highlighting the advantage of Group B's ligamentum teres reinforcement technique.

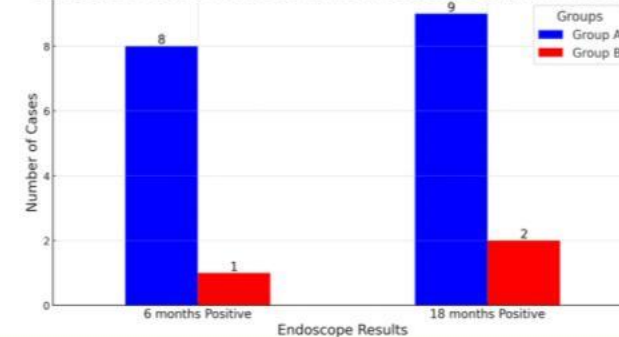


SG with reinforced GEJ using ligamentum teres.



Symptoms of reflux

Endoscope Positive Results Comparison between Group A and Group B



	Group A N=30	Group B N=30	Test of significance
Hiatus Hernia Occurrence	3(10.0%)	1(3.3%)	FET =1.07 P=0.300
Mean Hernia Size (Mean ± SD)	2.5 ± 0.8	1.2±0.0	t=8.90
Min-Max	1.5-4.0	1.2-1.2	P<0.001*

comparison of hiatus hernia incidence and size between studied groups

Comparison of hiatus hernia incidence and size between two groups: Group A (sleeve gastrectomy only) and Group B (sleeve gastrectomy with LTR). The incidence of hiatus hernia was higher in Group A (10.0%) compared to Group B (3.3%), although this difference was not statistically significant (Fisher's exact test, $P=0.300$). However, the mean size of the hernia was significantly larger in Group A (2.5 ± 0.8 cm) than in Group B (1.2 ± 0.0 cm), with the student t-test showing a highly significant difference ($P<0.001$).

Conclusion

The incorporation of LTR during LSG may offer significant benefits in reducing postoperative complications, particularly GERD and the occurrence of hiatal hernias. Patients who underwent LSG with LTR exhibited lower rates of GERD symptoms and a reduced incidence of hiatal hernias compared to those who had the standard LSG procedure without reinforcement.

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Introduction

Morbid obesity and type 2 diabetes are rising rapidly, with 80% of diagnosed cases being obese (1). Metabolic surgery, particularly OAGB, offers effective diabetes remission, even for lower BMI patients, with fewer complications than Roux-en-Y gastric bypass (RYGB) (2).

AIM

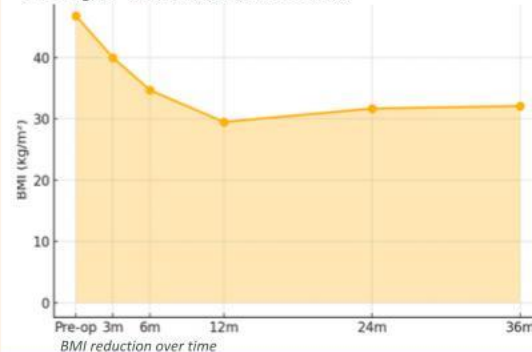
The aim of the study is to evaluate the outcomes of OAGB in diabetic obese patients treated at the bariatric center. Also to assess whether OAGB could serve as an alternative to Roux-en-Y Gastric Bypass (RYGB) for managing diabetes in obese individuals. Additionally, the study investigates whether preoperative factors, such as Body Mass Index (BMI) and the usage of antidiabetic medication, can predict postoperative diabetes remission outcomes

Method

Between 2009 and 2015, 472 diabetic patients (349 women) underwent OAGB surgery, with comprehensive preoperative evaluation and follow-up by a multidisciplinary team. Pre- and postsurgical management followed NIH guidelines, with Barrett's esophagus and severe GERD patients redirected to RYGB surgery. A five-port technique was used for the procedure, and postoperative care included clear fluids, gradual food introduction

Results

The study evaluated the outcomes of One Anastomosis Gastric Bypass (OAGB) on 472 diabetic patients, focusing on weight loss, HbA1c improvement, and diabetes remission over three years. At one-year post-operation, the mean BMI significantly dropped from $46.8 \pm 7.2 \text{ kg/m}^2$ to $29.5 \pm 2.8 \text{ kg/m}^2$, and HbA1c reduced from $9.6 \pm 1.3\%$ to $5.7 \pm 1.5\%$. By the three-year follow-up, the mean BMI stabilized at $32.1 \pm 3.3 \text{ kg/m}^2$ with HbA1c at $5.8 \pm 0.9\%$.

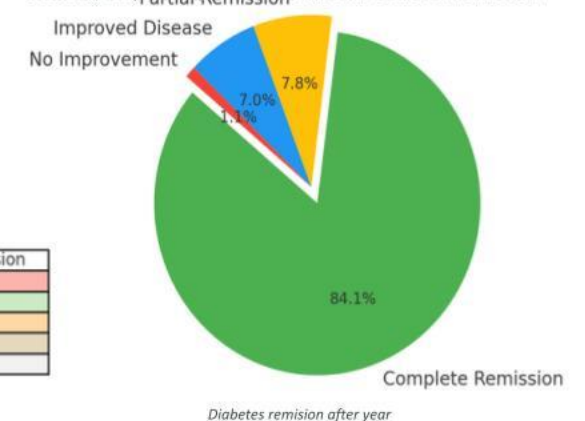


Complications were minimal, with an overall rate of 6.8%. The most common issue was iron deficiency anemia (3.8%). Weight loss patterns showed rapid reduction within the first year, followed by slight weight regain over the next two years.

Preoperative Treatment of DM	No. of DM Remission	Percentage of DM Remission
No drugs	43/43	100%
Single oral drug	142/154	92.2%
Two oral drugs	139/146	95.2%
Three oral drugs	21/29	72.4%
Injection	52/100	52%

Diabetes remission rates according to the preoperative management of DM

The study achieved complete diabetes remission in 84.1% of patients at one year, increasing to 90.9% by year three among those with continued follow-up. Partial remission was observed in 7.8% of patients, while 7% showed improved diabetes control, and 1.1% exhibited no improvement. The remission rates were higher in patients using oral hypoglycemic drugs before surgery, with 95.2% remission for those on two oral medications. In contrast, only 52% of patients on insulin achieved remission.



Conclusions

OAGB is a simple, safe, effective, easy to learn and easy to reverse procedure. It has acceptable complications and mortality rates. Therefore, OAGB has the ability to be an excellent alternative to RYGB in the treatment of diabetic obese patients. BMI could not be used for the prediction of postoperative diabetic remission, but preoperative medication is a good predictive factor. Longer follow-up for diabetic remission is needed. Future prospective and large subjective trials about the impact of bariatric surgery on type 1 DM should be performed

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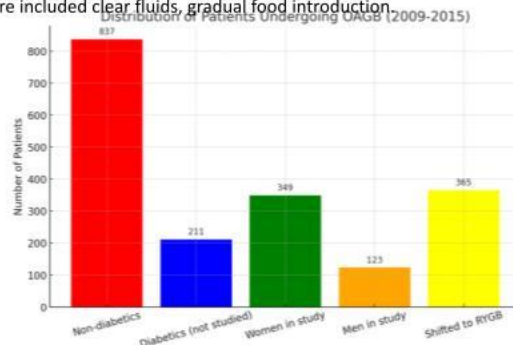
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A08. The Outcomes of Revisional One Anastomosis Gastric Bypass Versus Revisional Roux-en-Y Gastric Bypass After Primary Restrictive Procedures

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Introduction

primary restrictive bariatric procedures, such as laparoscopic gastric banding and VBG, were once popular but often resulted in complications like weight regain and poor quality of life. LVSG also gained popularity but has shown long-term weight regain.

AIM

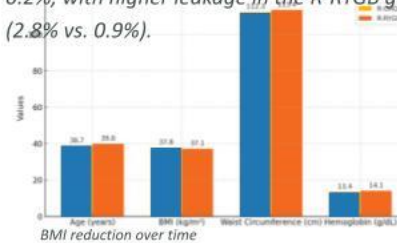
to evaluate the effectiveness of one-anastomosis gastric bypass (OAGB) as a revisional procedure for failed restrictive bariatric surgeries and compare its outcomes with those of Roux-en-Y gastric bypass (RYGB) in terms of weight loss, reflux symptoms, and complications.

Method

between May 2009 and December 2016, involved 348 patients with failed restrictive bariatric procedures. Patients underwent laparoscopic revisional gastric bypass, with 243 receiving one-anastomosis gastric bypass (OAGB) and 105 undergoing Roux-en-Y gastric bypass (RYGB). The study excluded patients with certain conditions and aimed to compare outcomes, focusing on weight loss, complications, and reflux symptoms.

Results

Between May 2009 and December 2016, 348 patients underwent laparoscopic revisional bypass surgery after failed restrictive bariatric procedures. The mean age was 39.3 years, with a preoperative BMI of 37.5 kg/m². All surgeries were completed laparoscopically, averaging 71.5 minutes, with a 2.1-day hospital stay. R-OAGB was performed on 243 patients and R-RYGB on 105. R-OAGB resulted in greater weight loss (71.8% vs. 58.3%, $p=0.032$). The overall mortality rate was 0.2%, with higher leakage in the R-RYGB group (2.8% vs. 0.9%).

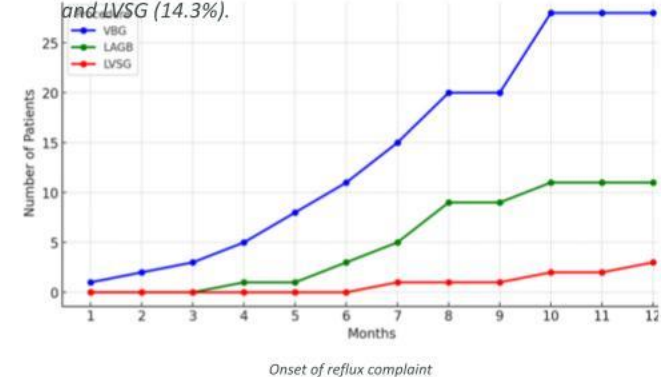


Parameter	R-OAGB	R-RYGB	p-value
Operative time (min)	57.7 ± 55.8	85.3 ± 44.5	0.023*
Mean of EWL%	71.8 ± 5.9	58.3 ± 6.6	0.032*
Minor complications	15 (6.2%)	12 (11.4%)	0.279
Major complications	27 (11.1%)	9 (8.6%)	0.946
Leakage	1 (0.4%)	3 (2.8%)	0.033*
Bleeding	1 (0.4%)	0 (0%)	0.481
Intractable reflux	52 (21.4%)	3 (2.9%)	0.001*
Hb 1 year post-op (g/dL)	8.2 ± 0.5	12.8 ± 3.2	0.030*
Iron deficiency	33 (13.5%)	5 (4.7%)	0.048*
Mortality	1	0	0.481

Operative Parameters and Complications Between Revisional-One Anastomosis Gastric Bypass and Revisional-Roux-en-Y Gastric Bypass

R-OAGB has shorter operative times, higher EWL%, and more iron deficiency but higher reflux rates. Significant differences appear in operative time, reflux, and Hb levels.

Intractable reflux occurred in 21.4% of R-OAGB patients versus 2.9% in R-RYGB ($p < 0.001$). While 78.6% of R-OAGB patients reported no reflux (SS score <4), 97.1% of R-RYGB patients did. Among 52 R-OAGB patients with severe reflux, 18 were treated with proton pump inhibitors, 4 underwent Braun anastomosis, and 30 were converted to RYGB, with 3 showing no improvement. Reflux rates were highest among R-OAGB patients with prior VBG (25.2%) compared to LAGB (16.9%) and LVSG (14.3%).



Conclusion

The R-OAGB is simple, safe, effective, and easy to learn with a better weight loss than R-RYGB, but it has a higher chance of reflux and anemia in long-term follow-up. R-OAGB has acceptable reflux rates after LAGB and LVSG, but not recommended after LVBG

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A13. Single Anastomosis Sleeve Ileal Bypass compared to One Anastomosis Gastric Bypass for Sleeve Gastrectomy adult non responders Retrospective study



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INTRODUCTION

Single Anastomosis Sleeve Ileal Bypass(SASI)is a Novel Metabolic/Bariatric Surgery operation based on Santoro's bipartition operation.
One Anastomosis Gastric Bypass(OAGB) or Minigastric Bypass(MGB)is a growing bariatric procedure that had been invented by Dr. Rutledge and is considered now the third commonly performed procedure worldwide after laparoscopic sleeve gastrectomy and classical gastric bypass .Both SASI and OAGB can be offered for patients with weight regain after Sleeve gastrectomy.

AIM

THE STUDY AIMS TO COMPARE THE EFFECTIVENESS AND SAFETY OF THESE PROCEDURES IN TERMS OF WEIGHT LOSS, IMPROVEMENT OF COMORBIDITIES, AND POTENTIAL COMPLICATIONS.

METHOD

ABSTRACT : SLEEVE GASTRECTOMY (SG)IS A COMMONLY PERFORMED BARIATRIC PROCEDURE . WEIGHT REGAIN FOLLOWING SG IS A SIGNIFICANT ISSUE .YET , THE UNDERSTANDING OF THIS PHENOMENON IS STILL UNCLEAR . RATES OF REGAIN RANGED FROM 5.7% AT 2 YEARS TO 75.6% AT 6 YEARS . SASI BYPASS AND OAGB WERE AN OPTION FOR SOME CANDIDATES HAVING SG DONE 2 YEARS BACK AND FAILED TO ACHIEVE THE REQUIRED WEIGHT LOSS OR HAVING WEIGHT REGAIN . IN SASI BYPASS , RESLEEVE GASTRECTOMY OF THE DILATED GASTRIC POUCH IS DONE FOLLOWED BY PPLICATION OF THE STAPLER LINE THEN CREATING A BIPARTITION CHANNEL DOING A SIDE TO SIDE GASTRO-ILEAL ANASTOMOSIS AT 3M OF ILEOCAECAL VALVE . IN OAGB , TRANSACTION OF STOMACH AT CLAW FOOT LEVEL FOLLOWED BY RESECTION OF A DILATED POUCH IS DONE , THEN A GASTRO-JENOSTOMY IS CREATED (END TO SIDE) AT 200 CM FROM DUODENO -JEJUNAL JUNCTION .

FROM FEB 2018 TILL FEB 2022 ,180 PATIENTS HAD BEEN DIVIDED IN TWO GROUPS , PROCEDURES HAD BEEN PERFORMED IN SIDRA KUWAIT HOSPITAL AND HADI HOSPITAL IN KUWAIT .A RETROSPECTIVE STUDY COMPARING MINI GASTRIC BYPASS (MGB/OAGB)AND SASI BIPARTION AS REVISIONAL PROCEDURE AFTER SLEEVE DASTRECTOMY FOR NON RESPONDERS(INADEQUATE WEIGHT LOSS)

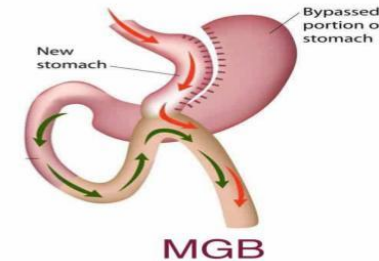
EXCLUSION CRITERIA : PATIENTS WITH HISTORY OF BYPASS BARIATRIC SURGERY AND PATIENTS WITH DOCUMENTED PSYCHOLOGICAL INSTABILITY OR INTOLERABILITY FOR REGULAR FOLLOW UP , PATIENTS ASKING FOR PRIMARY BARIATRIC PROCEDURE .PATIENTS WITH NON DILATED GASTRIC POUCH WERE EXCLUDED FROM THE STUDY

(EVALUATION HAD BEEN DONE BY ENDOSCOPY AND CT VOLUMETRIC STOMACH STUDY).

METHOD :- 90 CASES HAD BEEN SELECTED IN EACH GROUP .IN SASI BIPARTITION THE GASTROILEAL ANASTOMOSIS WAS DONE 3 METRES FROM ILEOCAECAL VALVE AND IN MGB/OAGB: THE GASTROJEJUNAL ANASTOMOSIS WAS DONE 2 METRES FROM LIGAMENTES OF TRIETS.IN BOTH CASES THE GASTRO-INTESTINAL ANASTOMOSIS WAS 4 CM.

RESULTS

Both groups had been followed up for the above mentioned parameters(Weight loss, glycated haemoglobin ,lipid profile,Serum albumin ,serum iron and vitamins levels) the study revealed that the weight loss was nearly the same in both groups Gastro- Orsophageal reflux was nearly same in both groups , late complication were detected in three patients in MGB/OAGB group in regard to marginal ulcers (two of them had been treated conservatively)All patients had been kept on multivitamin supplementations ,However Severe malnutrition and hypo albuminaemia were detected in 4 casee of MGB/OAGB group (two of them converted surgically).Medical comorbidities like diabetes ,Hypertension ,hyperlipidaemia had been improved in both groups in affected patients



CONCLUSION

SASI BYPASS LOOKS SUPERIOR TO OAGB/MGB SHOWING A HIGHER SAFETY PROFILE AGAINST MALNUTRITION OR MARGINAL ULCER .BOTH PROCEDURES LOOKS NEARLY EQUIVALENT REGARDING WEIGHT LOSS , AND SURGICAL LEARNING CURVE , WHILE SASI BIPARTITION STILL EASIER TO REVERSE.

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ACKNOWLEDGEMENTS

THANKS FOR PROT .SANJAY ARGUAL AND ORGANISING COMMITTEE OF **LIBSS**

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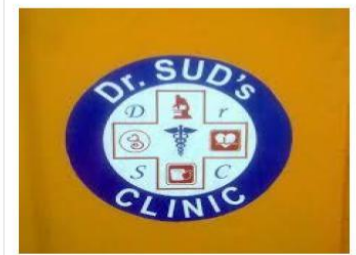
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A15. Bariatric Surgery vs. Oral Anti-Obesity Medication – The Future of Weight Loss, A Real World Evidence of Oral Semaglutide in Indian People with Diabetes and Obesity.

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INTRODUCTION

Managing T2DM in India is challenging, especially with the added burden of obesity. India is among top three most obese nations. A Lancet study published in March 2024 says that in India, the obesity rate increased from 1.2% in 1990 to 9.8% in 2022 for women and 0.5% to 5.4% in 2022 for men. Oral Semaglutide offers a novel, non-injectable GLP 1 RA option that may improve treatment adherence and outcomes in this population.

AIM

This observational real world study reveals the outcomes of oral Semaglutide use in Indian People with type 2 diabetes (PWD), and its impact on glycaemic control and weight management.

METHOD

The study included 60 adult PWD with (mean BMI 34.1), (39 females) from my center, who were prescribed oral Semaglutide. Mean age 36.2 ± 3.6 for males and 34.4 ± 2.8 for females. The mean duration of Diabetes detection was 1.5 ± 1.2 years. Outcomes such as HbA1c reduction, weight loss, and side effects were monitored over a period of one year. The Standard of Care (SOC) for glycaemic management, like oral anti-hyperglycaemic drugs, statins, lifestyle modification with dietary restrictions and statins as per ADA criteria was followed.

CONCLUSIONS

Oral Semaglutide shows promising results in significantly improving glycaemic control and reducing weight in Indian PWD. Its favourable safety profile and ease of use could make it a strong contender for Bariatric surgery in the management of Obesity and Diabetes.

RESULTS

The study found significant reductions in both HbA1c (mean 1.98 %) and weight loss (mean 15.9 %) from baseline, by the end of the study. Side effects were mild and included nausea and anorexia for the initial 3 to 4 weeks of starting therapy. The adverse effects were well managed with supportive therapy without any dropouts.

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ACKNOWLEDGEMENTS

I acknowledge the untiring efforts of my clinic and hospital staff who assisted me in compiling the clinical data and follow ups with the patients. Without their support it would not have been possible for me to complete this study with my busy practice schedule.

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INTRODUCTION

Existing bariatric and metabolic procedures come with their own set of technical difficulties, complications, risks, and challenges, such as varied outcomes, anastomotic leaks, nutritional deficiencies, and re-operations, prompting the development of novel techniques that aim to balance efficacy with reduced postoperative complications and weight regain. Inadequate weight loss, weight regain and relapse of comorbidities are other challenge that leads to increase in revisional surgeries. Cost is another factor that limits its widespread implementation of bariatric and metabolic surgery.

AIM

To further reducing the insult and complications associated with bariatric and metabolic Surgeries, and to study the feasibility of a novel hybrid procedure combing the principles of Gastric Imbrication and Single Anastomosis Sleeve Jejunal Bypass. To evaluate the short term outcome with regards to % excess weight loss, nutrition deficiencies and resolution of comorbidities.

METHOD

We discuss 3 cases of Single Anastomosis Imbrication Jejunosotomy (SAIJ), a novel bariatric procedure that combines principles from existing techniques like Single Anastomosis Sleeve Jejunal Bypass and Gastric Imbrication to offer a potentially safer alternative to other metabolic procedures. Introduced by the author in June 2024, SAIJ involves creating a single anastomosis between the gastric antrum and proximal jejunum, while preserving the stomach's natural anatomy through imbrication. This result is aimed to facilitate significant weight loss and resolution of comorbidities.

The patient was placed in modified Loyd Davis and reverse Trendelenburg position with the surgeon standing between the patient's legs. Three port technique of port placement was used for the procedure using the Rule of Hand technique, with both working ports as 12 mm trocars. Liver was retracted using "Hiatal sling" technique.

PROCEDURE

As in the classic gastric imbrication or sleeve gastrectomy, the dissection was started with the separation of the greater omentum from the stomach at 5'0 clock position using ultrasonic shear. The dissection then was continued antegrade to divide the short gastric vessels and to clear the left crus from any attachments including gastrosplenic, gastrophrenic and phreno-esophageal ligaments. Any retrogastric adhesions with pancreas were severed. The dissection then continued retrograde till 4 cm from the pylorus

A 40-French gastric calibration tube was introduced as a guide. Using a 2-0 VLOC PBT the greater curvature of stomach was plicated loose around the bougie with continuous thick bites taken on anterior and posterior wall of the stomach starting from the fundus. Imbrication was continued till about 4 - 5cm from the pylorus. Second layer of imbricating sutures were taken using 2.0 prolene interrupted sutures such that the imbricated stomach snug around the bougie.

A 200cm of BP limb was brought ante-colic and anti-reflux sutures applied to the imbricated border of the stomach around 4 - 6 cm below the OG junction. An anterior 4 cm antro-jejunal anastomosis was carried out making sure antral disruption of the gastric imbrication 2 cm from pylorus to the anti-mesentric border of the jejunum was carried out. Anastomosis was done by staple-less technique using 4 layer hand-sewn with 2'0 PDS. Methylene blue dye test was performed to assess for the integrity of the anastomosis. The postoperative period was uneventful, and all patients were discharged on POD1 on liquid diet.

CONCLUSIONS

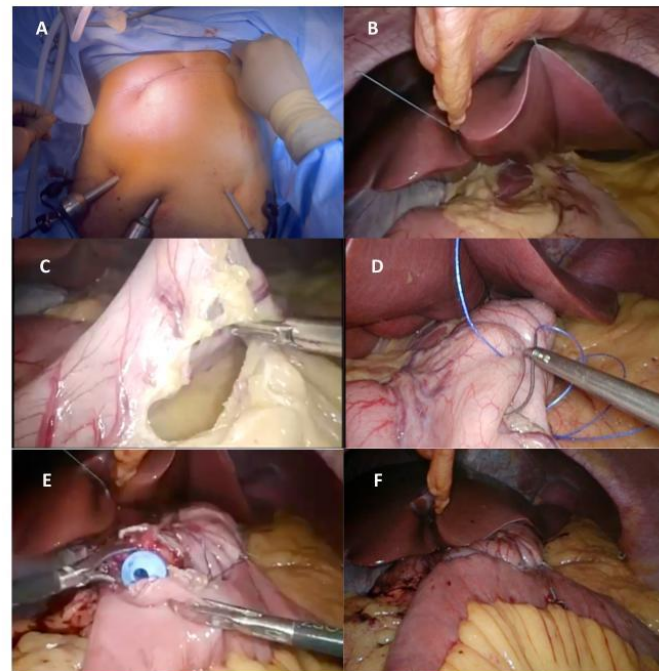
Single Anastomosis Imbrication Jejunal Bypass (SAIJ) is a simpler yet a significant alternative compared to traditional bariatric and metabolic surgeries.

This technique provides a less insulting and cost-effective solution with potentially lesser complication rates than other metabolic procedures.

With transit of solid food throughout the bypasses stomach beyond one month, SAIJ behaves similar to OAGB

The short-term outcome is comparable to standard bariatric and metabolic procedures in relation to excess weight loss, nutritional deficiencies and resolution of comorbidities

Staple less technique of SAIJ is further economical which makes it one of the most affordable, yet effective procedure in the market.



RESULT

Post-op check UGI scopy on POD 1 showed invaginated gastric mucosa with no obstruction and the GJ site being normal.

Scintigraphy on POD 30 showed 10% food transiting through duodenum and on POD 90, 100% transit of food only through the bypass.

Parameters	Case1	Case2	Case3
Op. Time (min)	66	54	48
ALOS (hrs)	44	44	44
Post-op Period	Vomiting - 1	Uneventful	Uneventful
Complications	Nil	Nil	Nil
% EWL 3 m	28	32	31
Comorbid 3 m	Resolved	Improved	Resolved

Figure:

A: Three port technique of port placement. B: Hiatal sling liver traction. C: Omental dissection like in a classical sleeve, but not too close to the stomach. D: Two layered imbrication around a 40F bougie, first layer with continuous and second with interrupted, both non-absorbable sutures. E: 4-5 cm wide four layered side-to-side hand sewn antro-jejunal anastomosis using absorbable sutures. F: Methylene blue leak test at the end of the procedure.

ACKNOWLEDGEMENTS

BAROS team of consultant and associate surgeons, surgical registrar, nutritionists, psychologist, physician assistant and Apollo hospital staffs and administration for supporting this novel procedure.

Patients for trusting us with their informed written consent.

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A21: Efficiency of Cruroplasty as a Treatment of Gastro-Esophageal Reflux Disease in Morbid Obese Patients with Hiatus Hernia during Sleeve-Gastrectomy

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Introduction

The effect of LSG on GERD is controversial. Although concomitant hiatal hernia repair at the time of LSG is common and advocated by many, there are few data on the outcomes of GERD symptoms in these patients.

AIM

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).

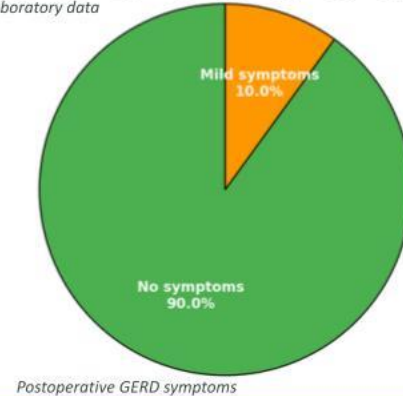
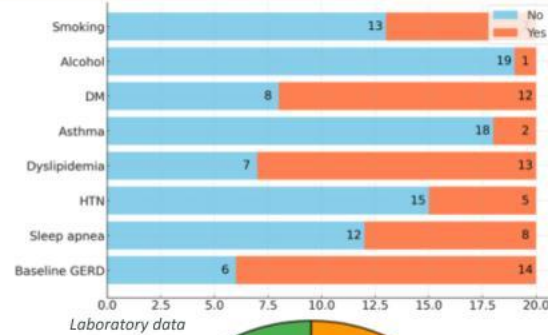
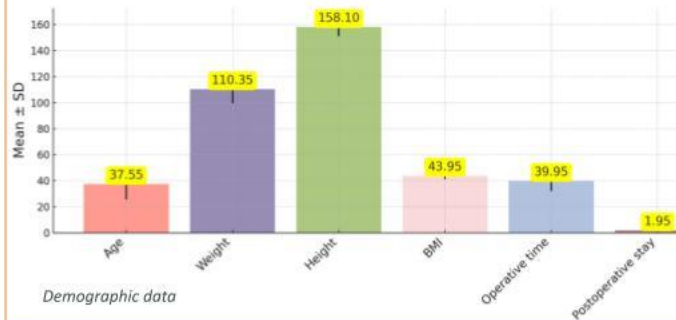
Method

This retrospective cohort study analyzed 20 patients (ages 18-60) undergoing LSG with cruroplasty at Ain Shams hospitals. Outcomes from July 2018 to July 2019 focused on GERD improvement, BMI changes, and crural repair efficacy. Preoperative heparin and antibiotics were given; no catheters, drains, or postoperative heparin were used. Patients ambulated early, began a liquid diet within six hours, and were discharged the next day if stable.



Results

The study included 20 participants aged 20–55 years (mean 37.55 ± 11.77), with 75% female and 25% male. Their mean weight was 110.38 ± 20.54 kg, height 158.10 ± 6.98 cm, and BMI 43.55 ± 1.98. The average operative time was 399.95 ± 30.89 minutes, and hospital stays lasted 1.95 ± 0.76 days. GERD was present in 70%, sleep apnea in 40%, hypertension in 45%, dyslipidemia in 85%, and asthma in 15%. Diabetes affected 40%, with treatments split between oral (20%), insulin (41.7%), and both (38.3%). Additionally, 15% consumed alcohol, and 35% were smokers.



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.

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Variable	Preoperative	3 Months Postoperative	Significance
Size of H. Hernia			HS
- 0	0 (0.0%)	18 (90.0%)	
- 1	11 (55.0%)	2 (10.0%)	
- 2	9 (45.0%)	0 (0.0%)	
Esophagitis			HS
- No	5 (25.0%)	15 (75.0%)	
- Yes	15 (75.0%)	5 (25.0%)	
Gastritis			S
- No	15 (75.0%)	20 (100.0%)	
- Yes	5 (25.0%)	0 (0.0%)	

Comparison between preoperative data and 3 months postoperative

Most participants (65%) were non-smokers, and 95% did not consume alcohol. Other conditions such as DM (40%), dyslipidemia (65%), hypertension (25%), and sleep apnea (40%) were reported, with asthma being the least common (10%). Baseline GERD was present in 70% of participants. Figure 2 shows postoperative GERD symptoms, with 90% of participants reporting no symptoms and 10% experiencing mild symptoms, suggesting that the intervention was effective in minimizing GERD-related symptoms.

Acknowledgements

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INTRODUCTION

Bariatric surgery is a vital intervention for severe obesity and metabolic disorders. However, its establishment in resource-limited settings poses unique challenges and opportunities. We developed bariatric surgery department to tackle the growing obesity crisis despite limited resources, inadequate facilities, and low public awareness in Mayo Hospital, Lahore, largest tertiary care institution in Punjab, Pakistan

AIM

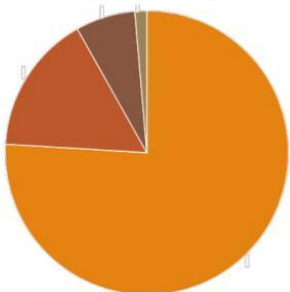
To evaluate the feasibility of developing a bariatric surgery department in a resource-constrained setting, focusing on identifying the challenges encountered and the opportunities that arise from establishing this program.

METHOD

Descriptive study analyzed the

Impact Score for challenges and Benefit Score for opportunities on the first 91 bariatric surgeries at Mayo Hospital included:

- Laparoscopic Sleeve Gastrectomies (LSG): 67 cases
- Mini-Gastric Bypass (MGB): 14 cases
- Single-Anastomosis Sleeve Ileal (SASI) Bypass: 6 cases
- Roux-en-Y Gastric Bypass (RYGB): 4 cases



RESULTS

Impact Score for Challenges measures the severity of each challenge based on predefined criteria. Challenges are

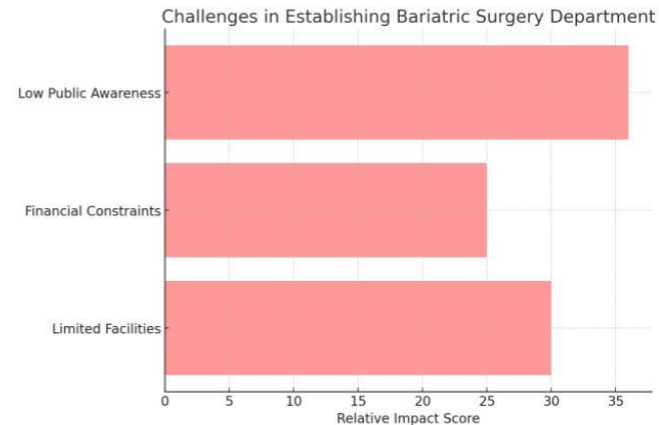
- Limited Facilities, Financial Constraints and Low Public Awareness

Each challenge is evaluated based on Frequency, Severity and Mitigation Difficulty with 1 to 10 score scale (1= low impact and 10= highest impact)

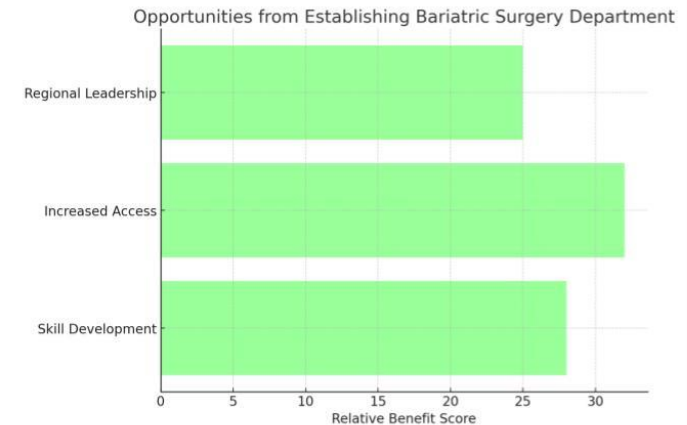
Benefit Score for Opportunities evaluates the advantages provided by the program i.e.

- Skill Development, Increased Access and Regional Leadership

Each opportunity is assessed based on Feasibility, Impact and Sustainability with 1 to 10 score scale (1= low impact and 10= highest impact)



Impact Score for Challenges in establishing Bariatric Surgery Department in Mayo Hospital Lahore, Punjab



Benefit Score from Opportunities in establishing Bariatric Surgery Department in Mayo Hospital Lahore, Punjab

CONCLUSIONS

The development of a bariatric surgery department in Mayo Hospital illustrates that, even in resource-limited environments, such initiatives are feasible and impactful. Addressing the challenges has led to creating significant opportunities for advancing healthcare in the region. This effort underscores the importance of fostering innovation and resilience in public healthcare systems.

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ACKNOWLEDGEMENTS

Vice Chancellor and administration of Mayo Hospital, Lahore, and King Edward Medical University.

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INTRODUCTION

DELAYED STAPLER LINE LEAK IN PATIENT WITH LAPAROSCOPIC SLEEVE GASTRECTOMY WAS A VERY RARE COMPLICATION. WE REPORTED A CASE SUCCESSFULLY TREATED WITH ENDOSCOPIC STENTING AND PERCUTANEOUS DRAINAGE.

A 44 year old female with pre-op BMI of 39 kg/m² underwent laparoscopic sleeve gastrectomy successfully but was readmitted one month later for vomiting. Oral contrast study showed slight narrowing at gastric incisura, but contrast flowed smoothly into small bowel. Further history taking revealed that she had been eating too fast and too much so therefore led to vomiting. She was discharged home well after hydration and proper dietary counselling.

She was readmitted 2 months later for vomiting. Contrast study showed contained leak at upper dilated sleeve gastrectomy with stricture at incisura (fig 1). The Impression was obstruction at incisura causing vomiting with subsequent back pressure into upper sleeve stomach leading to stapler line leak. An Agile 18mmx149mm fully covered stent was inserted from the lower esophagus to pylorus, covering the leak site and straightening the narrowing at the incisura (fig 2). The patient was resumed oral intake with minimal vomiting. She was discharged home few days later.

However, the patient developed constant vomiting again one month later. Oral contrast study showed the stent had migrated distally and exposing the leak site. The stent was removed and another Ultra-flex 23mmx155mm fully covered stent was inserted. A CT scan performed showed a 5cm abscess collection next to the leak site which was successfully drained by CT guided percutaneous drainage.

The patient tolerated oral feeding well. She was discharged home with percutaneous drainage tube with few mls output daily. Oral contrast was done 6 weeks later. It showed there was a no further leak, the contrast flow smoothly into duodenum and the abscess cavity had almost completely resolved (fig 3). She remained well currently 6 months after the surgery. She has lost 30 kg. Her current BMI was 26.6 kg/m².

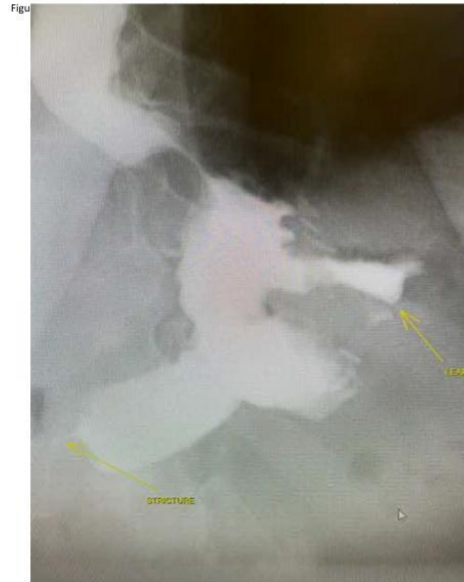


Figure 1 : Stricture at incisura with dilated proximal sleeved stomach and contained leak

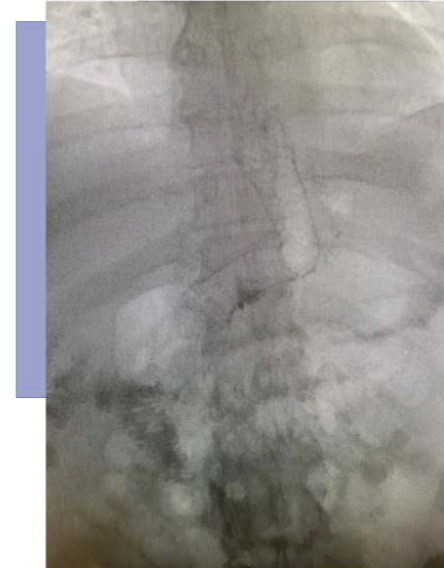


Figure 2 Deployment of Agile Stent



Fig 3: Oral Contrast study showed no leak and free flow into duodenum. Injection of contrast through percutaneous drain showed previous abscess cavity (next to stapled leak site) almost resolved.

CONCLUSIONS

DELAYED CONTAINED LEAK AND VOMITING POST LAPAROSCOPIC SLEEVE GASTRECTOMY IS RARE AND IT CAN BE TREATED SUCCESSFULLY WITH NON-SURGICAL MEANS.

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2. Swansea University Medical School, Swansea University, UK

INTRODUCTION

Achalasia has been reported after metabolic-bariatric surgery (MBS), including sleeve gastrectomy (SG). The pathophysiological mechanism underlying this presentation, whether as a missed diagnosis pre-operatively or a new condition developing after surgery, remains uncertain. Limited evidence exists to guide the treatment approaches in this rare situation.

AIM

To systematically review the literature for all reports of achalasia after SG to inform the evidence-based management of this unique and challenging presentation.

METHOD

A systematic review of Ovid MEDLINE, Embase, Cochrane Central Register of Controlled Trials and Cochrane Database of Systematic Reviews was conducted for all published cases of achalasia in patients who had undergone SG.

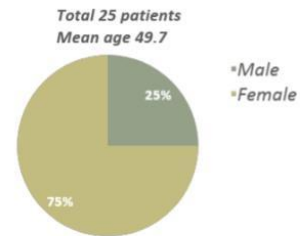


Fig 1: Demographics (n=25)

CASE REPORT

A 52-year-old female with class II obesity was referred to our institute (tertiary referral centre for MBS) with progressive dysphagia, regurgitation and weight loss. Investigations were compatible with type III achalasia. Unfortunately, this lady had recently travelled abroad and undergone SG as a treatment for obesity. Within the first few months post-operatively, symptoms worsened with micro-aspiration as a complication of regurgitation and vomiting.

RESULTS

A total of 25 patients (mean age 49.7, Female 75%) in 19 published studies met the inclusion criteria. The majority (n=12, 63%) had type II achalasia. Peroral endoscopic myotomy (POEM, n=11) and laparoscopic Heller's myotomy with Roux-en-Y gastric bypass (LHM & RYGB, n=8) emerged as the main interventions. However, LHM on its own without RYGB (n=5) resulted in a high clinical failure rate (40%). Reflux oesophagitis was reported in 36% of patients managed with POEM (n=4) who were followed up for more than 12 months.

CONCLUSIONS

While achalasia remains a challenging condition in the bariatric patients, endoscopic (POEM) and laparoscopic (LHM & RYGB) interventions have been shown as technically safe and clinically effective options for patients with achalasia after SG. Particularly in the context of this scarce literature base, further investigation of this challenging clinical presentation is warranted and structured long-term follow-up of these individuals should be undertaken.

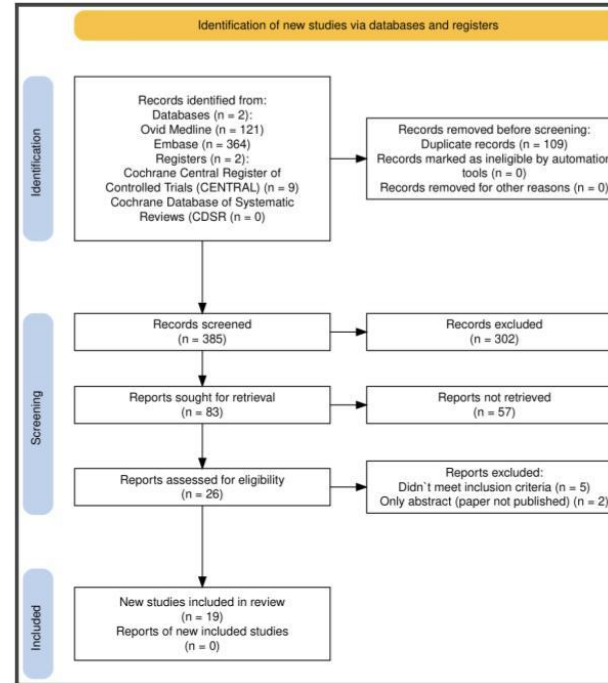


Fig 2: PRISMA Flow Diagram

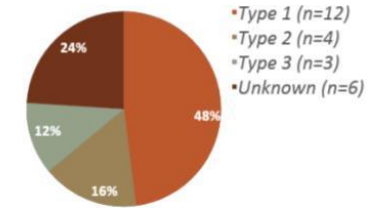


Fig 3: Types of Achalasia

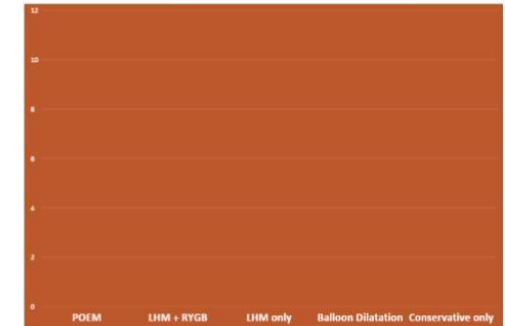


Fig 4: Types of Intervention

REFERENCES

Please use the QR code below to see the full reference list



ACKNOWLEDGEMENTS

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The Royal College of Surgeons of England

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A29. Perceptions of Obesity and Bariatric Surgery Among Newly Qualified Doctors: A Multi-Hospital Survey Study

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2. Department of Surgery, King's College Hospital, King's College Hospital NHS Foundation Trust, London, UK

INTRODUCTION

- Obesity rates continue to rise. Bariatric surgery is an important intervention for managing severe obesity.
- There is currently a lack of obesity training at all levels of medical education throughout the world [1].
- Foundation Year 1 (FY1) doctors represent the front line of the NHS and play a critical role in the management of obesity and obesity-related conditions.

AIM

- To assess FY1 doctors' awareness, knowledge, and perceptions of obesity and bariatric surgery, evaluate their familiarity with NHS-recommended obesity interventions (lifestyle modifications, pharmacotherapy, surgery) and their comfort level in managing bariatric and metabolic surgery patients.

METHOD

- Study design: Multi-centre, cross-sectional survey study.
- Survey period: August 2024 – October 2024.
- Inclusion criteria: All newly qualified FY1 doctors at 7 South-East London hospitals.
- Data collected on:
 - Demographics (age, gender, hospital site)
 - Attitudes towards obesity and bariatric surgery
 - Prior training/experience
 - Familiarity with bariatric surgery and related procedures
 - Confidence in managing bariatric and metabolic surgery patients
 - Perceived educational needs

ACKNOWLEDGEMENTS

Thanks to the FY1 doctors at the participating hospitals for their contributions to this study.

RESULTS

Table 1. Demographic data

Number of respondents		60
Age	<25	26
	25-30	29
	31-35	3
	>35	2
Gender	Male	26
	Female	33
	Prefer not to say	1

Fig 4. What is the most effective treatment for obesity?

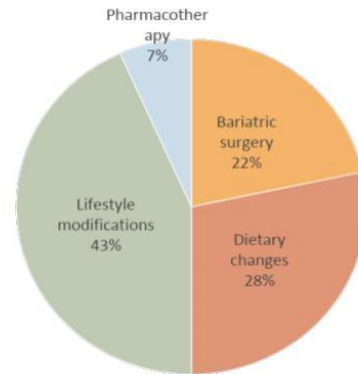


Fig 1. Perceptions of Obesity and Bariatric Surgery

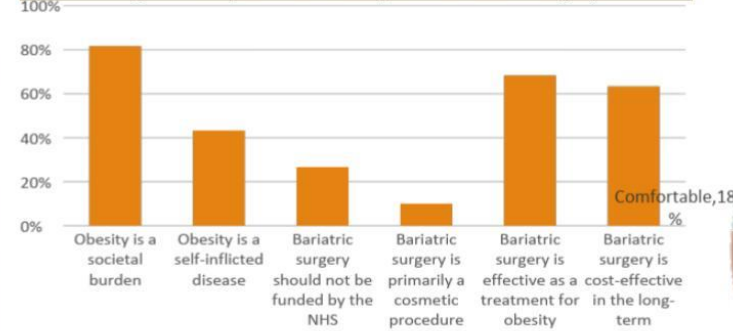


Fig 5. Which of the following bariatric procedures are you familiar with?

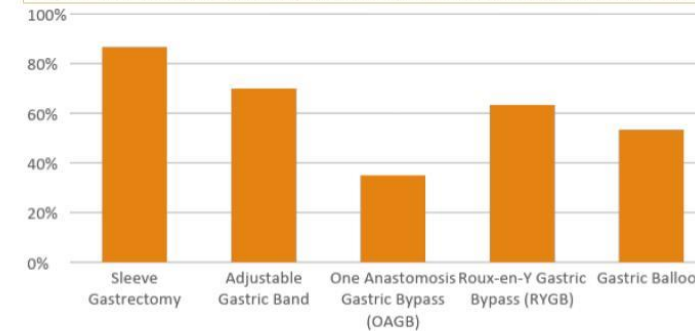


Fig 2. How comfortable do you feel in managing patients undergoing bariatric surgery?

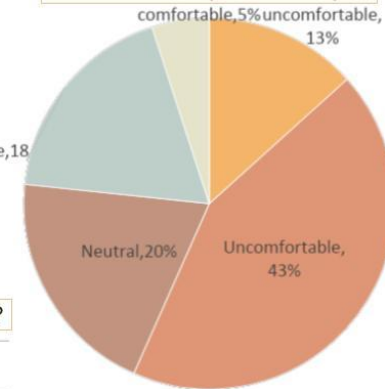
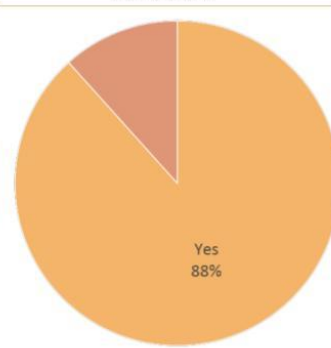


Fig 3. Should more training on obesity and bariatric surgery be incorporated into the medical curriculum?



Summary of responses regarding prior training/experience

- 47/60 (78.3%) – received no formal training on bariatric surgery during medical school
- 18/60 (30%) – did not have any exposure to real-life patients undergoing bariatric surgery during their medical school placements

CONCLUSIONS

- FY1 doctors showed limited confidence in managing patients undergoing bariatric and metabolic surgery, likely due to insufficient formal training.
- Specific knowledge gaps were identified, including limited familiarity with certain bariatric procedures and insufficient awareness of bariatric surgery's effectiveness and cost-efficiency in treating obesity.
- There is a need and want for enhanced education on obesity and bariatric surgery in undergraduate and early postgraduate medical training.

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A30. The Role of Histopathology in Sleeve Gastrectomy: Does it Change Clinical Management?

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1. Department of Surgery, University Hospital Lewisham, Lewisham and Greenwich NHS Trust, London, United Kingdom

INTRODUCTION

- Sleeve gastrectomy is the most performed bariatric surgery.
- While studies report a high prevalence of chronic gastritis [1], actionable findings are rare [2].
- The clinical significance and cost-effectiveness of routine histopathology remain unclear.

AIM

- To assess whether histopathology results lead to changes in clinical management (e.g., deviation from usual post-operative care).
- Secondary aim: Assess the prevalence of key histopathological findings (gastritis, H. Pylori, intestinal metaplasia, dysplasia, malignancy).

METHOD

- Study design: Single-centre, retrospective observational study.
- Study period: July 2021 - July 2022.
- Inclusion criteria: All patients undergoing SG.
- Data collected on:
 - ✓ Demographics (age, gender, BMI)
 - ✓ Pre-operative endoscopy results
 - ✓ Histopathology results
 - ✓ Changes in clinical management assessed via clinic letters (minimum one-year follow-up).

RESULTS

POPULATION

Table 1. Demographic data

Number of patients	70
Age (years), median (IQR)	44 (35-53)
Female, n (%)	57 (81.4%)
BMI (kg/m ²), median (IQR)	46.5 (42.4-51.4)

PREVALENCE OF HISTOPATHOLOGICAL FINDINGS

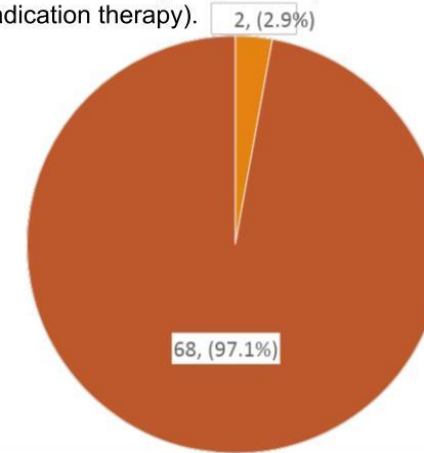
Table 2. Histopathological findings

Gastritis (total), n (%)	41 (58.6%)
Mild gastritis, n (%)	33 (47.1%)
Moderate gastritis, n (%)	8 (11.4%)
Severe gastritis, n (%)	0 (0%)
H.Pylori positive, n (%)	9 (12.9%)
Intestinal metaplasia, n (%)	3 (4.8%)
Dysplasia/malignancy, n (%)	0 (0%)

ASSESSING CHANGE IN CLINICAL MANAGEMENT

Histopathology led to a change in management in only 2 cases (2.9%):

- One 11mm incidental GIST (required post-op surveillance gastroscopy).
- One case of H. Pylori gastritis (treated with eradication therapy).



CONCLUSIONS

- Histopathology rarely changed clinical management after sleeve gastrectomy.
- No dysplasia or malignancy detected in any case.
- Routine examination may not be necessary, particularly when pre-operative gastroscopy is routinely performed.
- Further multi-centre research over longer periods is needed to evaluate the cost-effectiveness of routine histopathology in sleeve gastrectomy.

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INTRODUCTION

Robotic surgery, or robot-assisted surgery, is an innovation that provides enhanced precision, control, and flexibility for surgeons. Widely used systems: Da Vinci, Versius, Hugo, Mantra. Revolutionizing urology, gynecology, and cardiology. Aimed at improving surgical outcomes with minimal invasiveness.

AIM

This study aims to explore the innovative integration of artificial intelligence (AI) within robotic surgery, highlighting its potential to redefine surgical paradigms, enhance precision, and significantly improve patient outcomes.



METHOD

A comprehensive meta-analysis of recent advancements in robotic surgical systems and AI technologies was conducted, focusing on their synergistic effects. Metrics such as surgical accuracy, complication rates, and recovery trajectories were evaluated. Case studies were analyzed to showcase groundbreaking applications of AI, including machine learning algorithms and computer vision in various surgical specialties.

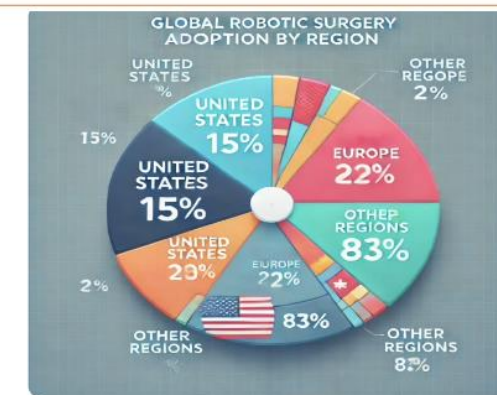


RESULTS

Findings reveal that AI-enhanced robotic systems facilitate unprecedented levels of surgical precision through advanced data analytics and real-time feedback mechanisms. Surgeons experience reduced cognitive load and increased operational efficiency, leading to lower complication rates and improved patient satisfaction. Notably, AI-driven simulations have emerged as a powerful tool for training, allowing for personalized skill development and accelerated competency in both novice and experienced surgeons. Furthermore, the capacity for AI to analyze vast datasets opens new avenues for predictive analytics in surgical outcomes, paving the way for more tailored patient care.



Metric	Traditional Surgery	Robotic Surgery	AI Technologies
Surgical Accuracy (%)	75	90	95
Complication Rates (%)	10	5	3
Recovery Time (days)	15	8	6



ACKNOWLEDGEMENTS

I Would like to express my deep gratitude to Professor Mamuka Tavkhelidze, Professor David Jikia, Hassan Wehbi; Professor Gocho Ochigava; Professor Vakhtang Charaia, Professor Andrew A. Gumbs, Professor Khatuna Kaladze, Yameen Khan, Bakur Arabuli, Khvicha Khajavelidze Rohit Gupta and Mariam Silagava for inspiration, collaboration and support.

Special gratitude to GRUNI, SSII, XNY Medical, GLR Georgia; HP Fund, Artificial Intelligence Surgery AIS and Medea International Medical Association MIMA for making this participation possible.

CONCLUSIONS

The integration of AI into robotic surgery is not merely an enhancement; it represents a paradigm shift in surgical practice. By fostering a collaborative environment where human expertise and machine intelligence converge, we can unlock new frontiers in surgical innovation. Future exploration should focus on ethical considerations, regulatory frameworks, and the scalability of these technologies to ensure they are accessible and beneficial to a broader patient population. The next decade holds immense promise for the evolution of surgical practices, driven by the relentless pursuit of excellence through AI and robotics, heralding a future where surgery is safer, more efficient, and deeply personalized.

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