A 01 - Possible Role of Omentopexy in Minimizing Post–Sleeve Gastrectomy Complications: A Retrospective Study

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INTRODUCTION

Laparoscopic sleeve Gastrectomy (LSG) has recently been recognized as potential stand alone operation for the treatment of obesity worldwide. However the incidence of postoperative nausea and vomiting is not uncommon in surgical practice, whereas other serious complications might occur including leakage or bleeding.

AIM

To evaluate the possible role of post-sleeve gastrectomy staple line plication and omentopexy to minimize the aforementioned postoperative complications.

METHOD

This is a retrospective study that was performed at Sidra Kuwait

Hospital in Kuwait. Data was collected from November 2014 to

December 2017. Three hundred patients were selected for this study divided into 2 groups to compare the outcome and the potential complications in each group.

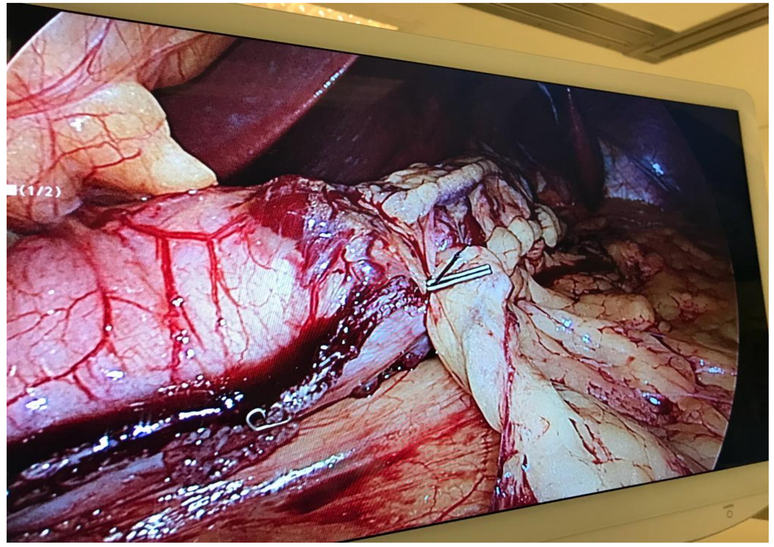
In group A, 150 patients had laparoscopic sleeve gastrectomy with

staple line plication and omentopexy.

In group B, 150 patients had laparoscopic sleeve gastrectomy alone. Both groups were followed and compared for the aforementioned complications.

RESULTS

- **No patients had leakage in Group A (0%), whereas 1 patient in group B (0.66%) had leakage on postoperative day 1.**
- **Eight patients had early postoperative vomiting in Group A (5.33%); one of them required hospital readmission for supportive treatment (0.66%). Eighteen patients in Group B (12%) suffered from vomiting, and 4 of them (2.6%) were hospitalized.**
- **Two patients in Group B (1.33%) had postoperative bleeding due to hemoglobin drop from**
- **14.9 to 10 g and from 13 g to 9.9 g. Both were treated conservatively with blood transfusion.**



SLG With omentopexy.

CONCLUSIONS

In this study, it was noticed that performing LSG with staple line plication and omentopexy may offer an extra guard and against postoperative nausea, vomiting leakage or bleeding.

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A 02 - Single stage laparoscopic Intragastric Balloon Removal Through gastrostomy and Sleeve Gastrectomy.

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INTRODUCTION

Laparoscopic sleeve gastrectomy is the most performed bariatric procedure nowadays. Intragastric balloons are frequently used but unsatisfactory results are not uncommon that's why bariatric procedure might be needed after the balloon.

AIM

The aim of this study was a prospective evaluation of the safety and feasibility of performing simultaneous laparoscopic balloon removal and sleeve Gastrectomy in morbidly obese patients (no previously reported data for this procedure).

METHOD

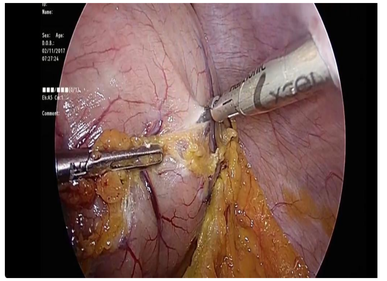
Fifty consecutive morbidly obese patients had undergone single stage Laparoscopic removal of intragastric balloon through a small gastrostomy at the greater curvature followed by Sleeve gastrectomy.

The intragastric balloon is deflated completely through 5 mm laparoscopic suction tube, then the balloon is removed through endobag from 12 mm trocar site. The gastrostomy is sutured then the Sleeve is performed as usual.

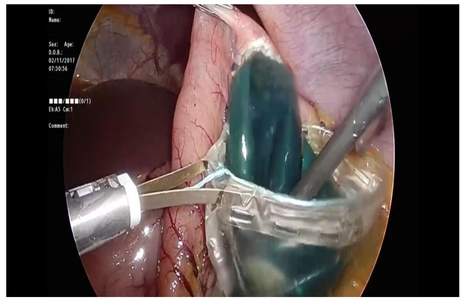
RESULTS

- **Balloon insertion did not resulted satisfactory weight reduction.**
- ***Simultaneous laparoscopic balloon removal and Sleeve gastrectomy was achieved for fifty cases.***
- ***There was no operative or postoperative morbidity or mortality.***
- ***Six months follow up showed gradual satisfactory reduction in the body mass index of the patients.***

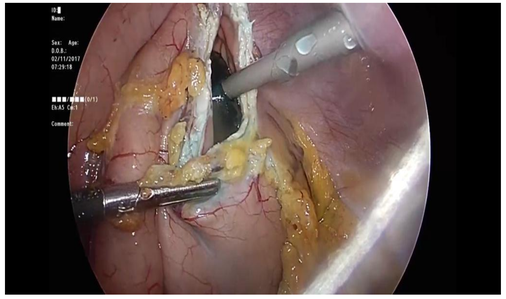
Inflated Balloon inside the Stomach



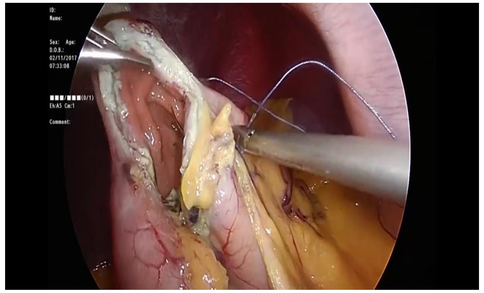
Small Gastrostomy At Greater curvature



Removal of the deflated balloon in endobag



Aspiration of intra balloon fluid with suction tube



Closure of gastrostomy before continuing the sleeve procedure

CONCLUSIONS

Simultaneous laparoscopic removal of intragastric balloon and sleeve gastrectomy is safe procedure and feasible as single stage procedure with good outcome.

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Thanks goes to Sidra Kuwait Hospital For continuous backup and support

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A 05 - Bariatric Surgery in the elderly population >65y: does it worth the risk? A systematic review.

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INTRODUCTION

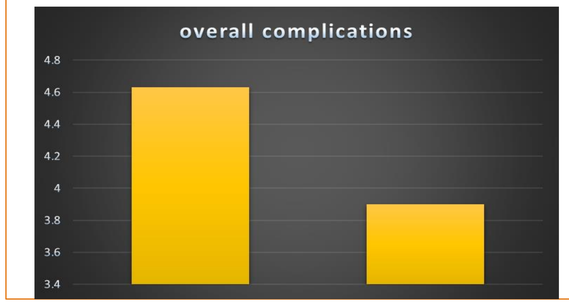
Life expectancy increases, and more elderly patients nowadays fit into the criteria for bariatric procedures. However, obese elderly patients might experience an increased risk of complications after bariatric operations.

AIM

We aimed to systematically review comparative studies on this issue in patients aged 65 years or older.

METHODS

An up-to-date systematic literature search was performed. Medline, Cochrane Library, Embase, Scopus, and Google Scholar were searched over the last ten years for studies on outcomes of bariatric surgery in obese elderly patients. Primary outcomes were mortality and overall complications. Secondary outcomes were the length of hospital stay, excess weight loss percentage, and effect on comorbidities.

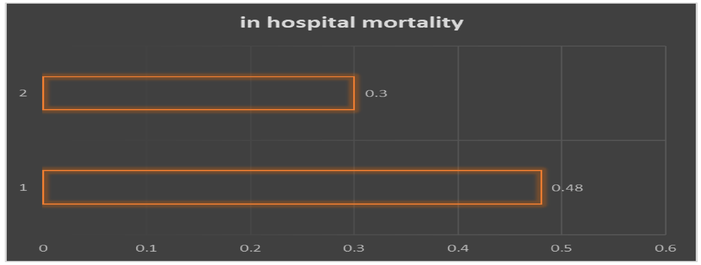


RESULTS

Seven studies involving 90496 patients were retrieved and included in this study. The mean age of the patients involved was 68.72 years.

Most studies directly compared elderly obese patients to younger ones < 65 years. The mean pre-op BMI was 43.4kg/m^2. Notably, elderly patients experienced 0.48% increased risk of mortality and 4.63% increased risk of overall complications.

Length of stay, diabetes, and obstructive sleep apnea remission rates were similar among the comparison groups. Elderly patients lost significantly more weight with Gastric Bypass compared with Sleeve gastrectomy.



Author	Year	Type of Study	Number of patients	LOS	In Hospital mortality	Overall complications
Vallois	2022	Retrospective	133	3.03 ± 1.4	0.09%	4%
R. Mabeza	2022	Retrospective	44183	2 (1-2)	0.3%	11.1%
M. Bhandari	2019	Retrospective	184	3 (1.7-3.6)	0.5%	7.5%
J.T. Dang	2023	Retrospective	40199	2 (1-2)	0.27%	4.6%
R.C. Moon	2016	Retrospective	353	n/a	1.4%	13.8%
M. Janik	2015	Retrospective	83	3 (1-6)	0..9%	1.01%
R.A. Casillas	2017	Observational	429	2 (1-2)	0.3%	30.5%
I.Goldberg	2019	Retrospective	5395	n/a	0.04%	1.04%
M.Smith	2019	Retrospective	641	n/a	0.9%	5.1%
A. Ramirez	2012	Retrospective	42	2 (0.43-3.4)	0%	7.5%

CONCLUSIONS

Overall complication rates of bariatric surgery are low in elderly patients >65 years. Bariatric surgery could be a safe and effective treatment option for the geriatric population. Careful selection criteria and thorough pre-assessment studies would definitely contribute to improving outcomes.

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A 06 -Symptomatic GORD after RYGB; what shall we do next?

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INTRODUCTION

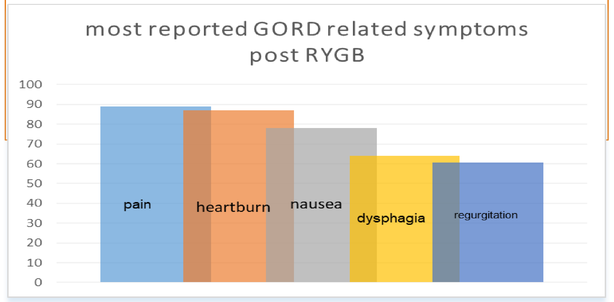
Laparoscopic Roux-en-Y gastric bypass (RYGB) is considered the gold standard for metabolic surgery in obese patients with GORD; however, in a subgroup of patients, pathological reflux may not be well controlled after this procedure. These patients with persistent or recurrent symptoms have limited surgical options.

AIM

To discuss surgical and endoscopic options to manage refractory GORD after RYGB and to evaluate possible anatomic and physiologic factors contributing to the appearance of these problems.

METHODS

We searched PubMed, MEDLINE, and Cochrane Library for articles published before July 2023 about persistent GORD after RYGB.



RESULTS

Eight retrospective studies with a total of 157 patients were identified. All studies investigated surgical and endoscopic options to treat this subgroup of patients.

The mean age was 48.46 years, and the mean BMI was 31kg/m2. Pain (89%), heartburn (87%), nausea (78%), dysphagia (64%) and regurgitation (60.7%) were the most reported symptoms; the Mean onset of symptoms occurred at 60 months after RYGB.

The most common cause of recurrent GORD was the presence of Hiatal Hernia followed by gastric pouch fistula, short alimentary limb and one study described a case of a long blind jejunal loop. Depending on the cause, surgical repair of the HH was performed in most of the studies with excellent results. One study reported alimentary limb lengthening to 100 cm with complete resolution of symptoms. Endoscopic strategies in the form of Stretta were also proposed in the subgroup of patients without anatomical findings but pathological pH manometry with statistically satisfactory outcomes.

Author	Year	Type of Study	Number of patients	Method	f/u (months)	BMI
Motola	2022	Retrospective	32	HH repair and/or Nissen fundoplication	18	34.1
Braghetto	2022	Retrospective	38	HH repair and gastric re-resection	12	n/a
Mattar	2006	Prospective	7	Stretta	20±2	29±2
Borbely	2018	Retrospective	47	N/A	N/A	30.3
Clapp	2020	Retrospective	7	HH repair with bioabsorbable mesh	12	34
Swartz	2009	Retrospective	16	laparoscopic alimentary (Roux) limb lengthening	14.9	N/A
Broderick	2019	Retrospective	4	LINX placement	N/A	30.1
Colpaert	2020	Retrospective	6	Modified Nissen fundoplication	12	24.2

CONCLUSIONS

Management of GORD in this uniquely challenging patient population still remains difficult. Careful follow-up and appropriate treatment, including surgical intervention, are needed in patients with ongoing reflux post-RYGB. As described, treatment choice depends on the main cause of symptoms.

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A 07 - Efficacy of liraglutide in weight regain after bariatric procedures: an up-to-date review of the existing literature.

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INTRODUCTION

Weight regain after bariatric surgery (BS) is, unfortunately, a reality that many patients face nowadays. It usually occurs in the long-term following most bariatric procedures, with 20–30% of patients either failing to reach their target weight goals or failing to maintain the achieved weight loss.

AIM

This review is aiming to shed light on the role of liraglutide in those patients who suffer from weight regain after their BS

METHODS

A systematic literature search through the PubMed database, Embase and the Cochrane Library was conducted in July 2023 in order to identify all relevant studies describing the use of Liraglutide after a failed bariatric procedure.

RESULTS

13 studies, with a total of 2983 patients and a median BMI of 39.89kg/m^2, were included in this review. More specifically, six were directly assessing weight loss with liraglutide; three were comparing liraglutide with revisional surgery, two were comparing liraglutide versus semaglutide and one study was comparing liraglutide to placebo.

The median percentage of weight loss was 7.1% (IQR 5.1-12.2%), and the median BMI change was 3.5 kg/m2.

The use of liraglutide in patients after failed bariatric surgery has also been associated with improvements in blood pressure and HbA1c, as demonstrated in 6 studies.

Patients who had a history of RYGB lost significantly more weight (-4.9%) than patients with a history of Sleeve gastrectomy (-2.8%). The median follow-up time was 18.6 months. The mortality rate was 0% in the liraglutide group.

Author	Year	Type of Study	Number of patients	Comparison group	Start BMI (kg/m2)	Result (kg)/BMI change
Pajecki	2013	Retrospective	15	Liraglutide 1.2 VS 1.8mg	42.4 ±4.1	-7.5 ± 4.3
Gorgojo-Martínez	2016	Retrospective	15	Liraglutide VS no treatment	40.3	-3.4
Miras	2019	RCT	80	Liraglutide VS placebo	39.6	-6.3
Wharton	2019	Retrospective	117	liraglutide 3.0 mg	42.5 ± 9.6	−6.3 ± 7.7
Thakur	2021	RCT	30	Liraglutide VS placebo	n/a	- 11.7 ± 3.5 (BMI change)
Horber	2021	Observational	95	Liraglutide VS surgical revision	31.2 ± 4.0	4.8 ± 2.9
Muratori	2022	Retrospective	62	liraglutide 3.0 mg	34.2 ± 4.8	− 5.1 ± 2.5 (BMI change)
Murvelashvili	2023	Retrospective	207	Liraglutide VS Semaglutide	40.4	n/a
Suliman	2019	Prospective	188	Liraglutide 3.0 mg	36.6	2.4-9.4
Rye	2018	Retrospective	20	Liraglutide 3.0 mg	39.1	- 4.7
Jensen	2023	RCT	50	Liraglutide VS Semaglutide	34.0	- 2.9 (BMI change)
Dharmaratnam	2022	Retrospective	177	Liraglutide VS surgical revision	42.1	n/a

CONCLUSIONS

Post-bariatric surgery patients with insufficient weight loss or excessive weight regain who used liraglutide for more than six months achieved a statistically significant weight loss, regardless of the type of BS they had undergone.

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A 10 - Dramatic Functional Improvement Following Sleeve Gastrectomy in a Super-Super Obese with Comorbidities equivalent to Absolute Contraindications for Bariatric Surgery

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INTRODUCTION

Bariatric Surgery(BS) is effective in treating Obstructive Sleep Apnea(OSA) in Morbidly Obese.

Pulmonary artery Hypertension(PAH) is usually associated with OSA.

PAH can also occur secondarily due to Left Heart disease(Mitral Stenosis).

BS is contraindicated in patients with severe Pulmonary Artery Hypertension(PAH).

AIM

To highlight, aggressive pre-operative optimization of morbidly obese with severe PAH may allow for its safe performance of surgery.

PAH serves more as an indication than a contraindication for BS, provided adequate optimization is done preoperatively

METHOD

Short-statured lady with a **BMI of 67.1 kg/m², weighing 155 kgs** had severe OSA with history of being put **on ventilator thrice in past** due to Type-2 Respiratory failure. She was moribund & **bedridden for past 12 years**.

She presented to ER with severe respiratory distress & gasping, so was **intubated**.

Her Trans-esophageal ECHO(TEE) suggested of **severe MS** with Mitral-Regurgitation(MR) with **severe PAH** secondary to Rheumatic heart disease(RHD).

She was already **refused for cardiac surgery** for her severe MS with MR due to very high risk of cardiac surgery secondary to super-super obesity & severe OSA.

She was managed conservatively on **Bosentan** & inhaled **iloprost** drugs to decrease her PAH preoperatively.

She was extubated after 12 days & was further optimised for next 10 days. With **VLCDs** she lost 15 kgs preoperatively & OSA improved.

Two Cardiologist were consulted for clearance for surgery, **one refused** to give it, other gave clearance under very high risk with **possibility of DOT**.

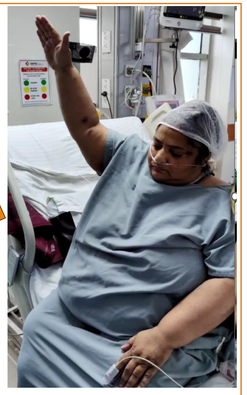
After adequate optimization & taking **high risk consent**, she underwent **Laparoscopic Sleeve Gastrectomy.**

RESULTS

She was kept intubated till 1st day post operative because of deranged blood gas parameters & poor cardiac function.

After extubation, she made an uneventful recovery & discharge 5th post operative day.

CPAP dependant past 12 years with h/o intubation 3 times past 3 years



Walking on 2nd POD, doing all limb physiotherapy exercises with no respiratory distress

Follow up –

10 months after surgery she has **lost 67kgs** of weight

Relieved of all OSA symptoms with no respiratory distress on walking.

Post operative, TEE also showed **marked improvement** in Systolic Pulmonary artery pressures & Trans Mitral valve Pressure gradients

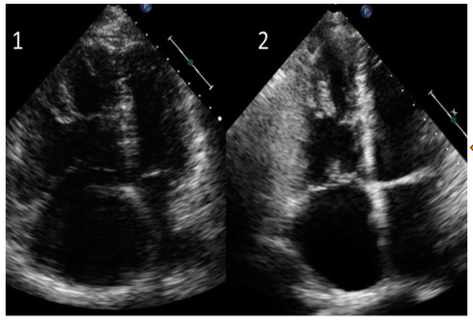
Remission of Diabetes

Relieved of backache and joint pains.

Patient after **losing 67 kgs,** free from OSA & Diabetes

Improved quality of life

TEE showing Right ventricle dilated before surgery (1)
v/s
Right ventricle size decreased 10 months after surgery (2)



CONCLUSIONS

BS can be performed after adequate pre-operative optimization of patients with severe PAH with an acceptable safety profile [1].

BS possibly offers the **best chance** for real functional improvement and, perhaps, extended survival of such high-risk patients.

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Indebt to the patient for giving the consent to use her images for this poster presentation

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A 14 - Revision Bariatric Surgery Following the failure of Initial restrictive surgery: A systematic review and meta-analysis

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The Royal Liverpool and Broadgreen University Hospitals NHS Trust

INTRODUCTION

The number of primary bariatric procedure in on the rise and so are revisional ones due to failure of primary restrictive surgery.. The most commonly performed revisional surgery are OAGB and RYGB however there is a a lack of long term follow up in the literature.

AIM

Our primary outcome was to look at the effect on weight loss in patients undergoing revisional surgery and the secondary outcomes were gastro-oesophageal reflux, operative time and intra-operative complications.

METHOD

A systematic search was performed among four major electronic databases (PubMed, Ovid, Embase and SCOPUS) identifying all studies comparing OAGB to RYGB as revision surgery.

Initial search identified 1600 articles, after title and abstract review nine papers met the inclusions criteria, eight retrospective studies and one RCT.

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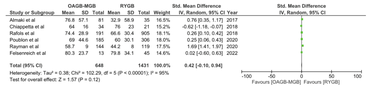
RESULTS

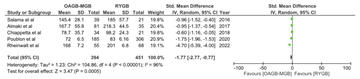
Estimated weight loss

The estimated weight loss was reported in six papers for a total population of 2,079 patients; 648 patients in the OAGB group and 1431 patients in the RYGB group. At 12 months follow up, there was no statistically significant difference demonstrated between OAGB and RYGB (OR 0.42, 95%CI -0.10,0.94, P= 0.12). A high level of heterogeneity among the studies existed (I^2 = 95%, P<0,00001).



Operative time

The operative time was reported in five studies, with a total of 845 patients. The remaining 3 studies didn't adequately report operative times. There was a **statistically significant benefit in the length of operative time that favoured OAGB** compared to RYGB (OR -1.77, 95% CI -2.77,-0.55, P=0.0005). A high level of heterogeneity among the studies existed (I^2 = 96%, P= <0.00001).



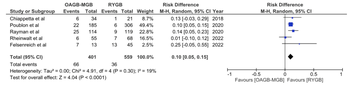
Anastomotic leak

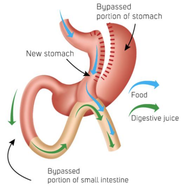
Anastomotic leak was reported in eight studies for a total of 2,262 patients.

The OAGB group reported 16/742 (2.15%) leaks while the RYGB group had 12/1520 (0.79%) leaks. There was no statistically significant difference in anastomotic leak rate between groups (OR 0.01, 95% CI -0.00, 0.02, P=0.29). A low level of heterogeneity among the studies existed (I^2 = 0%, P=0.45).

Post-operative reflux

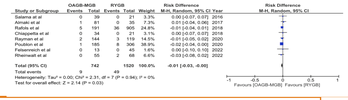
Post-operative reflux was reported in five papers[13-16, 20] (Fig 3). The incidence of post operative reflux was higher in the OAGB group compared to those in the RYGB group [66/401 (16.4%) vs 36/559 (6.4%)]. This difference was statically significant P<00001 (OR 0.10, 95% CI 0.05,0.15). A low level of heterogeneity among the studies existed (I^2 = 19%, P= 0.30).

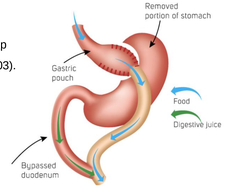




Post-operative bleeding

Post-operative bleeding was reported in eight studies, totalling 2,262 patients. Post- operative bleeding requiring intervention was slightly higher in the RYGB group compared to the OAGB group (3.2% vs 1.2%). This difference was not statistically significant (OR -0.01,95% CI -0.03,0.00, P=0.03). A low level of heterogeneity among the studies existed (I^2 = 0%, P= 0.94).





Study	Country	Design	Primary Procedure	Secondary procedure OAGB:RYGB	Follow up
Felsenreich *et al.*	Austria	Retrospective	LSG	13 : 45	60
Rayman *et al.*	Israel	Retrospective	LSG	144 : 119	32
Poublon *et al.*	Netherlands	Retrospective	LSG/LAGB	185 : 306	36
Chaippetta *et al.*	Italy	Retrospective	LSG	34 : 21	12
Rafols *et al.*	Multi-country	Retrospective	LAGB	191 : 905	33
Almalki *et al.*	Taiwan	Retrospective	LAGB	81 : 35	60
Salama *et al.*	Egypt	Retrospective	LAGB	39 : 21	12
Rheinwalt et al.	Germany	Retrospective	LSG	55 : 68	24
Hany et al.	Egypt	RCT	LSG	80 : 80	24

LSG: Laparoscopic sleeve gastrectomy
LAGB: Laparoscopic gastric band

CONCLUSIONS

In conclusion, our pooled data have shown similar results for %EWL for OAGB vs RYGB after failed restrictive primary procedure at 1 year follow up. RYGB has a significantly lower incidence of post-operative GORD however a significantly longer operative time compared to OAGB.

Main limitation was the high level of heterogenicity of the studies for our primary outcome. This was due to varied population and indications for revisional surgery.

Longer follow up comparing the two revisional procedure and further high-quality studies will help in comparing the two procedures and help clinicians and patients when discussing surgical options

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A 15 - Meta-Analysis of Bariatric Surgical Procedures in Adolescent Obesity: Impact on Weight Loss and Complications

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INTRODUCTION

- Pediatric obesity correlates with adverse health outcomes and heightened economic burdens on individuals and society [1].
- In 2019, the World Obesity Federation projected 206 million children and adolescents aged 5–19 with obesity by 2025, increasing to 254 million by 2030 [2].

AIM

- Our meta-analysis aimed to assess the impact of bariatric surgeries on weight reduction in adolescents.
- Laparoscopic Sleeve Gastrectomy (LSG), Laparoscopic Adjustable Gastric Banding (LAGB), and Roux-en-Y Gastric Bypass (RYGB) were evaluated, along with associated complications.

METHOD

- We conducted a systematic review following PRISMA and Cochrane Handbook guidelines, searching databases from inception to May 12, 2023 [3,4].
- Inclusion criteria comprised studies investigating bariatric surgery effects on **weight loss**, reporting BMI outcomes in English, and involving **human adolescents**.
- The quality assessment was done using the Newcastle-Ottawa Scale and the National Institutes of Health tool, and the meta-analysis was conducted using Stata software.

RESULTS

- From 1,826 initial studies, 56 met the criteria, and **45 were included in the meta-analysis**.
- LSG and LAGB showed significant body mass index (BMI) reductions up to 60 weeks (**LSG: -10.008, p = 0.002**; **LAGB: -9.684, p = 0.003**). Also, **RYGB** demonstrated a significant and sustained BMI reduction, notably at 24 weeks (-**18.076, p < 0.001**) and 36 weeks (-**18.145, p < 0.001**).
- Complications were assessed, revealing minimal complications related to LRYGB and LAGB.
- LSG was associated with a 1% incidence of hernia (Relative Risk (RR) = 0.01, p = 0.001), an 11% occurrence of cholecystectomy (RR = 1.1, p = 0.01), and a **10% leak incidence (RR = 1.01, p = 0.01)**.

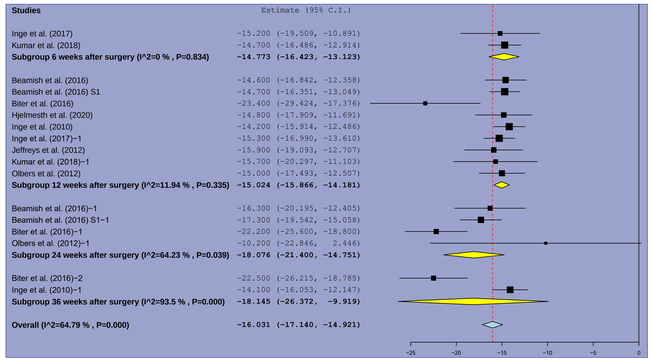

Figure 1: Forest Plot depicting the Effect of Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) on Adolescent BMI Reduction

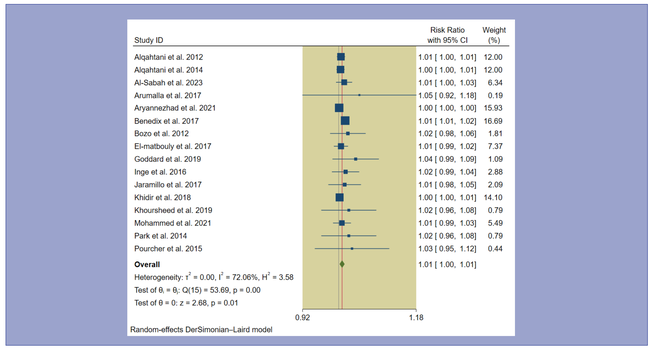

Figure 3: Forest Plot depicting the incidence of leak with Laparoscopic Sleeve Gastrectomy (LSG)

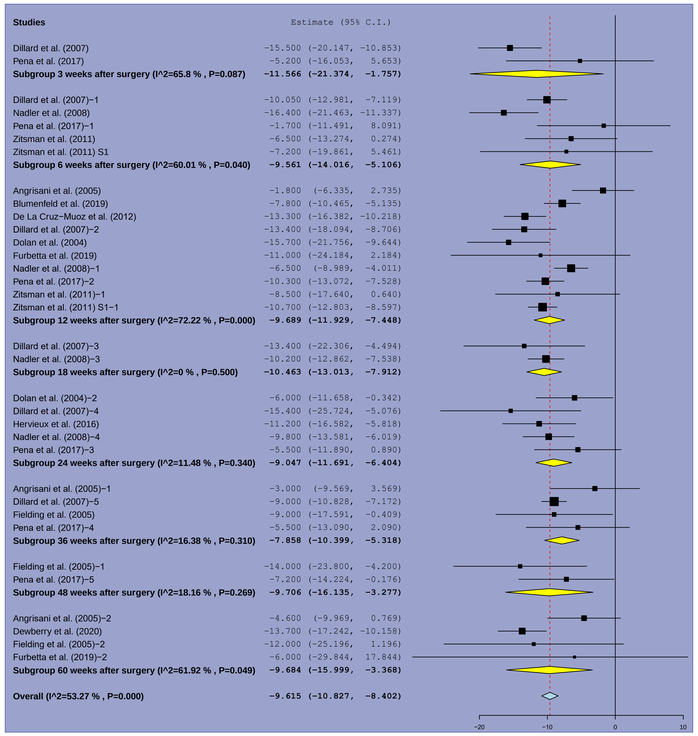

Figure 2: Forest Plot depicting the Effect of Laparoscopic Adjustable Gastric Banding (LAGB) on Adolescent BMI Reduction

CONCLUSIONS

- This meta-analysis highlights the efficacy of bariatric surgery in reducing BMI among adolescents.
- LSG, LAGB, and RYGB all yielded significant and sustained BMI reductions.
- While complications were generally low, LSG exhibited specific risks, emphasizing the importance of individualized patient assessment.

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SUPPLEMENTARY DATA

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A 23 - How Women Who Have Undergone Bariatric/Metabolic Surgery Conceptualise Weight Loss Success. A Qualitative Study.

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INTRODUCTION

+ Weight loss success tends to be viewed from a medical perspective (weight loss/maintenance or reduction of comorbidities).

+ Post operative outcomes of bariatric/metabolic surgery such as weight loss and complication rate are well documented.

+ Evidence suggests that there are several predictors of successful weight loss over time e.g.

having the internal motivation to lose weight, social support, and having better coping strategies and ability to handle life stress, goal setting, self-weighing and self-efficacy.

(Bergh et al., 2015; Elfhag, & Rössner, 2005).

+How individuals conceptualise post operative success is less well known

AIM

The aim of the study was to explore what weight loss success means to women who have undergone bariatric/metabolic surgery.

METHOD

+ Women (n=15) aged 18-45 years

+ Who had undergone bariatric/metabolic surgery at Western Sussex NHS Foundation Trust (now University Hospitals Sussex NHS Foundation Trust)

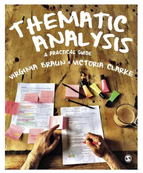
+ Were interviewed ≥ 1 year post surgery:
- **their weight loss experiences**
- **what success meant to them following surgery**

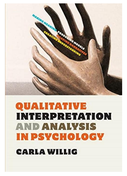
+ Interviews were transcribed and analysed using Thematic Analysis

ANALYSIS

+ Braun and Clarke's six-phase thematic analysis framework was followed (Braun & Clarke, 2006; 2013).

Familiarizing yourself with your data	Generating initial codes	Searching for themes	Reviewing themes	Defining and naming themes	Producing the report





RESULTS

Four themes with subthemes were identified

Life being less of a struggle	increased mobility and increased physical activity
	comorbidities resolved/ameliorated
	improvement in sleep
	weight maintenance/loss less of a struggle
Improved relationship with food	decreased interest in food (less food responsive)
	making healthier food choices
	greater portion control
Better interaction with others	improvement in relationship with spouse or partner/children/wider family/friends
	social approval/familial approval (feeling proud)
	more active time with children; being able to do more with them
Feeling better about oneself	improved self-image/self confidence
	feeling more hopeful about the future
	improvement in mood
	wider choice of clothes (shopping)/fitting into one's environment
The transcending theme	gratitude but tinged with a feeling of guilt at having been perceived as having taken the easy way out

Transcending these themes was a strong sense of gratitude towards the surgery…

tinged with a feeling of guilt at having been perceived as having taken the easy way out

CONCLUSIONS

+ Based on the 15 interviews in this study, women conceptualised success as **considerably more than just weight loss** but some felt guilty about some of the improvements they experienced.

+ **Four themes with subthemes were identified**. 1) Life being less of a struggle; 2) Improved relationship with food; 3) Better interactions with others; 4) Feeling better about oneself.

+ Transcending these themes was **a strong sense of gratitude** towards the surgery tinged with a **feeling of guilt at having been perceived as having taken the easy way out.**

+ Given the variability in weight loss in the longer term, a **focus on the wider benefits of surgery** may **help women adjust to the changes they experience.**

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A25 - Predictors of weight loss following pre-operative liver shrinkage diet

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INTRODUCTION

Liver shrinkage diet (LSD) is recommended for patients who are scheduled for bariatric surgery. The rationale for this being that an enlarged, fatty liver, especially the left lobe, can make visualisation of the stomach and hiatus difficult, thereby increasing operative complexity and complication risk.

AIM

Weight loss on the LSD is variable and we aim to investigate factors which can impact the degree of total body weight loss for patients undertaking this prior to bariatric surgery.

METHOD

We performed a single centre, retrospective study of all patients who underwent bariatric surgery between 1st December 2019 and 1st March 2023 at our institution. Our institution's LSD advises 800-1000kcal for two weeks prior to surgery. We collected patient demographic data, ethnicity, index of multiple deprivation, and weight at both preoperative assessment and on the day of surgery.

In order to explore the influence of potential factors associated with weight loss on the LSD both univariate analysis and multivariable regression analysis were performed. Statistical analysis was performed with GraphPad Prism v9.

RESULTS

One hundred and fifteen patients were analysed, with a mean age of 46 years. Of the patients, 78% were female, with an average total body weight loss of 4.5% as compared to 3.8% amongst the male group.

Univariate analysis of gender and weight prior to starting LSD showed a weak association (p=0.0647 and p=0.1 respectively) with total body weight loss.

In multiple regression analyses these two variables were independently associated with percentage of total body weight loss (p=0.01 and p=0.02 respectively) and together explained 7% of the variance. Age, ethnicity and social deprivation (as measured by the index of multiple deprivation using the patient's post code) did not predict weight loss following LSD.

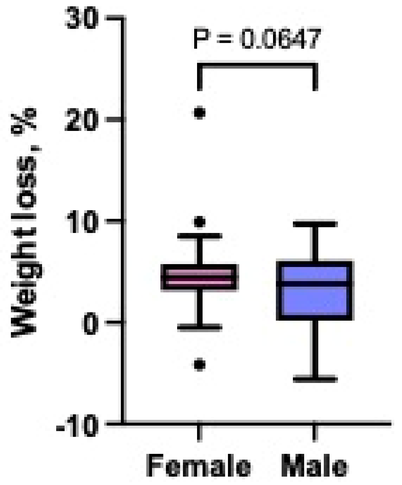

Figure 1 Total body weight loss following liver shrinkage diet by gender.

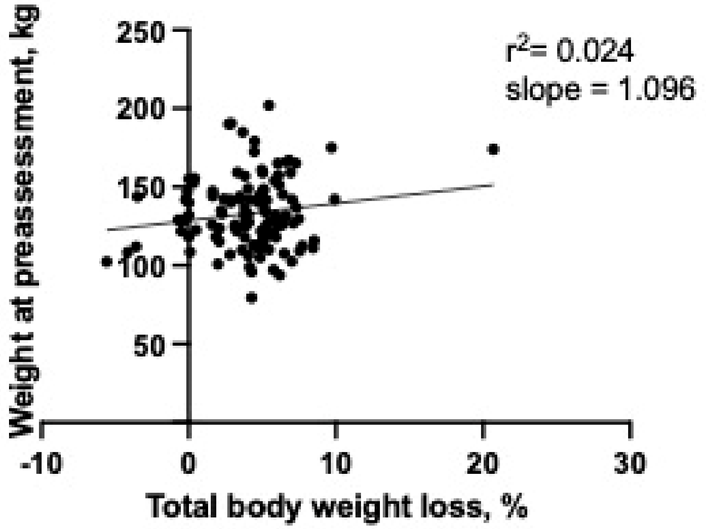

Figure 2 Total body weight loss following liver shrinkage diet by age. Solid line denotes linear regression analysis.

CONCLUSIONS

LSD is standard prior to patients undergoing bariatric surgery at our institution. Female patients and those with higher preoperative weight are likely to lose more weight following LSD.

The fact that neither ethnicity nor social deprivation affects total body weight loss on the preoperative LSD means that a standardised approach can be used for all patients and diets do not need to be modified.

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