



In the era of “Sleeve Revision”, What is the perfect algorithm? A Review of the literature.

Mohamed Elemawy, Reda Fawzy Ali

General Surgery Department, Kafr El Shiekh University Hospital, Kafr El Shiekh, Egypt.

BACKGROUND

- Laparoscopic sleeve gastrectomy (LSG) is the mainstream treatment option for patients with morbid obesity due to restrictive and endocrine mechanisms.¹
- However, it requires modifications for a subset of patients because of weight regain and tough complications, such as gastroesophageal reflux, strictures, gastric leak, and persistent metabolic syndrome.
- Revision surgeries have become more and more indispensable in bariatric surgery, accounting for 7.4% in 2016.²



MATERIALS & METHODS

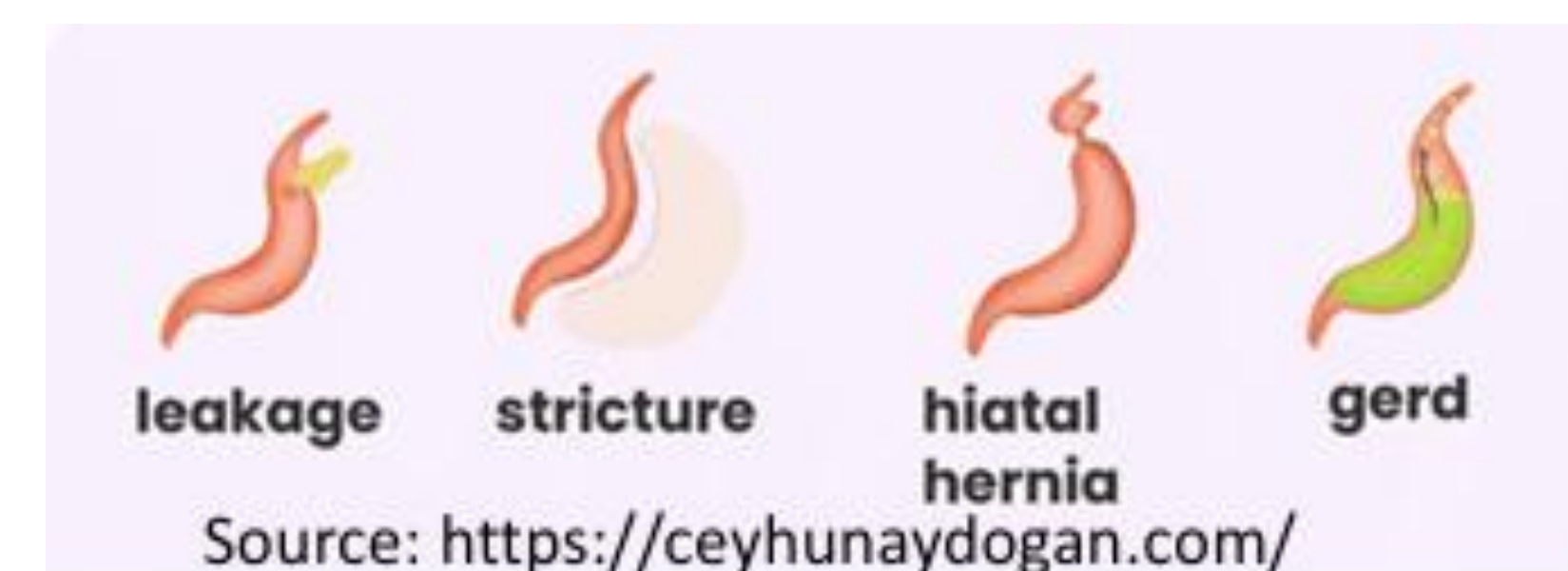
- A systematic literature search was performed in PubMed, Embase and Cochrane library according to the PRISMA reporting items. The meta-analysis was performed by RevMan5.3 software.
- The methodological quality of Randomized Controlled Trials and non-Randomized Controlled Trials were, respectively, assessed by Cochrane Collaboration's tool for assessing risk of bias and Newcastle-Ottawa scale.
- Studies were included if they were reporting the incidence of revisional surgery after LSG or other information sufficient to calculate the incidence. Non English studies, reviews, conference abstract, case reports, comments, letters, animal studies, and studies with the number of SG patients less than 20 or reporting zero value of incidence were excluded.

RESULTS

- Revisional bariatric surgeries after LSG include Roux en-Y gastric bypass, repeated sleeve gastrectomy, biliopancreatic diversion, duodenal switch, duodenal jejunal bypass, one-anastomosis gastric bypass (MGB), single anastomosis duodeno-ileal bypass (SADI) and transit bipartition.^{3,4}
- The overall revision rate was 10.4%, but for patients with ≥ 10 -year follow-up, the rate was 22.6%. European studies had a higher revision rate (14.4%) than other studies. The most common reason for revision was failure in weight loss, and the most frequent revisional procedure was gastric bypass.^{5,6}

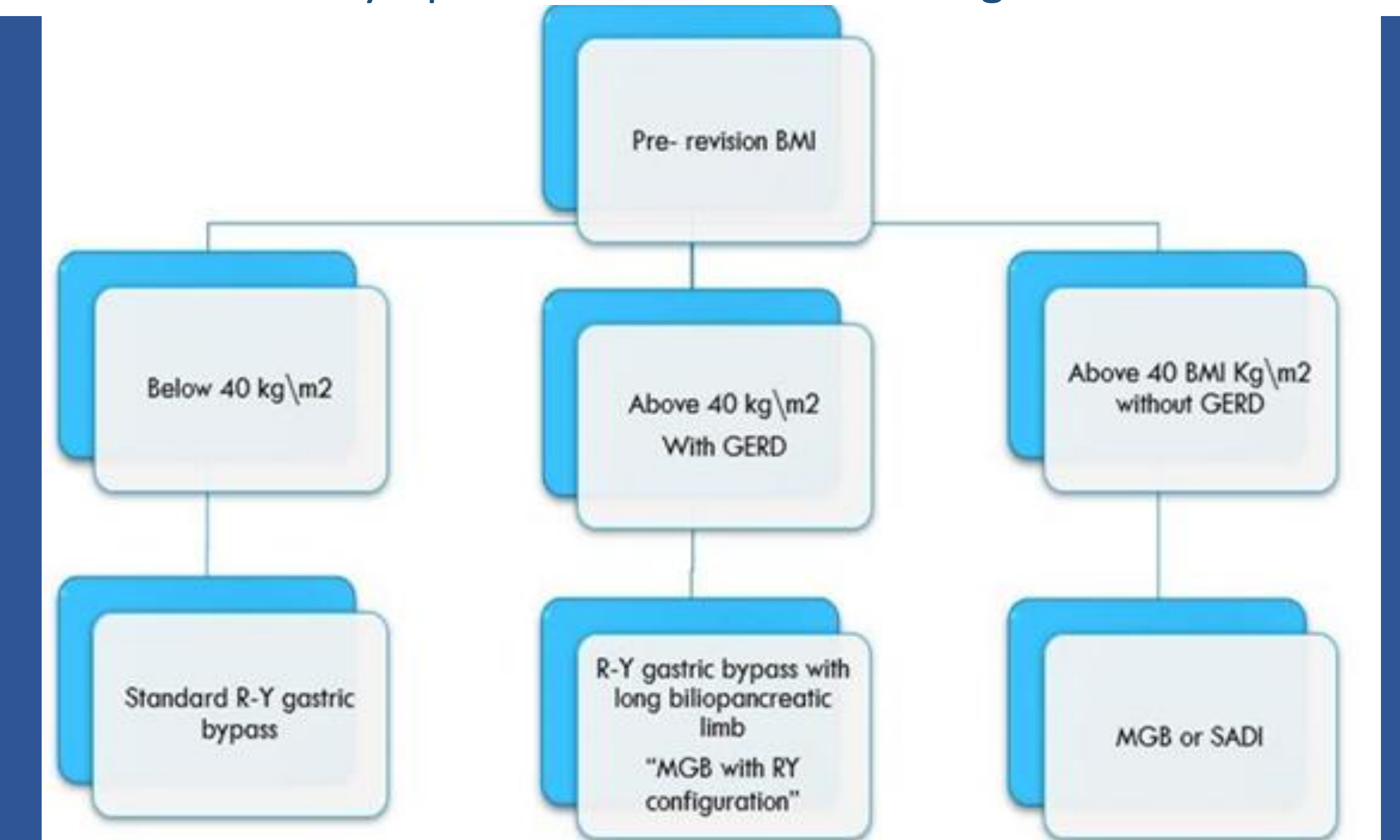
CAUSES OF REVISIONS

- Weight regain.
- Weight loss failure.
- GERD.
- Relapse of co-morbidities (DM and Hypertension)
- Complicated sleeves (twist, migration, stenosis, chronic leak)



CONCLUSIONS

Reaching a clear algorithm for revisional bariatric surgery is still debated. However, we assume that it depends mainly on pre-revisional BMI and presence of GERD symptoms as shown in the diagram



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Dr. Reda Fawzy Ali
(reda_fawzy@med.kfs.edu.eg)

Faculty of Medicine, Kafrelsheikh University, El-Geish Street.,
33565 Kafrelsheikh, Egypt.
Tel.: 047-3224707 Fax: 047-3223419,
website: www.kfs.edu.eg.