Bariatric surgery conversions after sleeve gastrectomy: BPD-DS may be safer than RYGB.

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Introduction

Bariatric conversion surgery has become more common. Using the most recent dataset from the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) we sought to analyze the trends of conversion from a prior sleeve gastrectomy and related outcomes.

Methods

- A retrospective analysis of the 2020-2021 MBSAQIP database was performed.
- Patients who underwent bariatric surgery conversions (BSC) from sleeve gastrectomy to:
  - Biliopancreatic diversion with duodenal switch (BPD-DS)
  - Roux en Y gastric bypass (RYGB)
  - Roux en Y distal gastric bypass (RYGB-d).
  - Single-anastomosis duodeno-ileal bypass sleeve (SADI-s).
  - One-anastomosis gastric bypass (OAGB).
- Descriptive analysis was performed, and 30 days outcomes were analyzed.

Variable \ Conversions	BPD-DS	RYGB	RYGB-d	SADI-s	OAGB	p-value
Length of Stay (LOS) days Median (IQR)	2 (1, 2)	1 (1, 2)	2 (1, 2)	1 (1, 2)	1 (1, 2)	< 0.001
*Minor Complications (%)	1.5	2.5	2.8	1.4	2.6	0.012
**Major Complications (%)	3.4	3.6	3.8	2.9	5.7	0.412
Any Complication (%)	4.4	5.7	5.9	3.9	7.8	0.036
Readmissions (%)	14	20	19	15	19	< 0.001

Table 1. Postoperative outcomes: LOS, complications and readmissions.
*Minor: Clavien Dindo I, II. **Major: Clavien Dindo III, IV.

Results

- 18.179 conversions from sleeve gastrectomy were identified:
  - BPD-DS: 1.153 (6.3%).
  - RYGB: 15.425 (85%).
  - RYGB-d: 685 (3.7%).
  - SADI-s: 723 (3.9%).
  - OAGB: 193 (1.1%).

Results

- Common indications included: GERD, inadequate weight loss or weight gain.
- Postoperatively, there were significant differences in minor complications (p=0.012) with BPD-DS and SADI-s having the lowest percentage compared with RYGB, RYGB-d, OAGB (1.4-1.5% vs 2.5-2.8%).
- **The percentage of readmissions was high in conversions to RYGB, RYGB-d, and OAGB** (19-20%) compared with BPD-DS and SADI-s (14-15%) (p<0.001).
- **No differences were found for any major complications (p=0.41) among the groups.**

Conclusions

- Major complications seem to be comparable across all types of conversion.
- **Overall, conversions from sleeve gastrectomy to both BPD-DS and SADI-s seem to be safer options compared to RYGB.**