Single Anastomosis Sleeve Ileal (SASI) Bypass vs One Anastomosis Gastric Bypass (OAGB) Outcomes: Systematic Review and Meta-analysis

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BACKGROUND

- Obesity and its associated comorbidities are a global health concern.
- Combining metabolic and restrictive approaches may improve treatment outcomes.
- The SASI bypass, which evolved from Santoro's technique, exemplifies this combined approach.

METHODS

- Primary outcomes were comorbidity remission, Excess Weight Loss (EWL) and Body Mass Index (BMI).
- Secondary outcomes were albumin, vitamin B12 and vitamin D measures.
- We included 8 studies after search and screening on PubMed, Scopus, Embase, and Cochrane databases.

High obesity-related medical problems remission rates are observed with ***no superiority*** between the procedures.

Obesity-related medical problems Remission

	OAGB	SASI	OR (95% CI)
Diabetes			0.99 (0.25-3.94) ***P=0.989***
Hypertension			0.53 (0.19-1.45) ***P=0.215***
Dyslipidemia			1.05 (0.39-2.81) ***P=0.918***
OSA			3.46 (0.49-24.20) ***P=0.211***

No difference between procedures.

Secondary outcomes

	MD (95% CI)
Albumin	0.13 (-0.17;0.44) ***P=0.39***
Vitamin D	0.93 (-13.64;15.50) ***P=0.90***
Vitamin B12	99.78 (26.61;172.95) P<0.01

Only Vitamin B12 had statistical significance and it favored SASI bypass.

RESULTS



EWL %
Mean difference
10.33
(95%-CI [-3.07; 23.73])
P=0.13
No difference

BMI Change
Mean difference
-0.64
(95%-CI [-3.37; 2.10])
P=0.65
No difference

TWL
Mean difference
3.87
(95%-CI [0.96; 6.78])
P<0.01
Favors SASI

Maximum patients included: 530

Obesity-related medical problems remission was assessed based on improvement from baseline.

Follow-up: from 6 to 12 months

CONCLUSION

- High comorbidities remission rates are observed in both OAGB and SASI Bypass with limited data suggesting no superiority between procedures.
- Either procedure may be preferred depending on complications, biliary access necessity, gastroesophageal reflux disease and surgeons' ability to perform the procedure. Such key points should be analyzed whenever data are sufficient.