

Endoscopic sleeve Gastroplasty Efficacy (ENvISaGE): Endoscopic sleeve gastroplasty versus Laparoscopic sleeve gastrectomy

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Accepted/In press: 31/05/2019

Document Version:
Peer reviewed version

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Recommended citation(APA):

Soni, A., Marshall, S., Cohen, F., Rich, G., Adib, R., & Isenring, E. (Accepted/In press). *Endoscopic sleeve Gastroplasty Efficacy (ENvISaGE): Endoscopic sleeve gastroplasty versus Laparoscopic sleeve gastrectomy*. Poster session presented at 21st Global Obesity Meeting, Brisbane, Australia.

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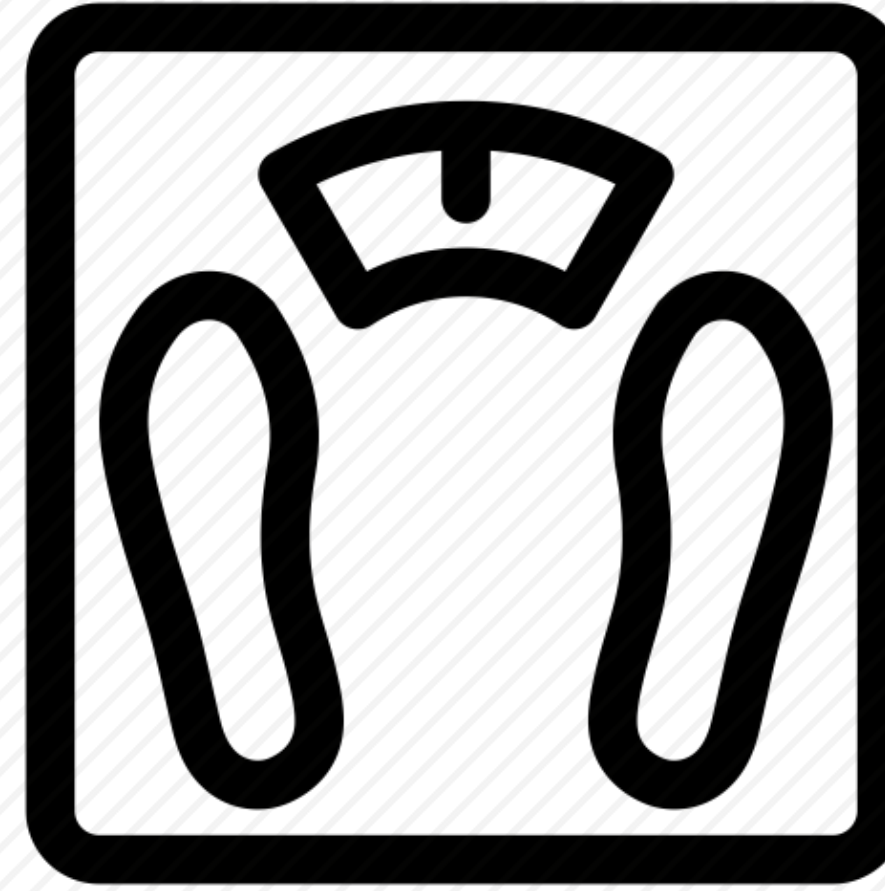


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Background

Improvement in quality of life is an important patient-centred outcome of bariatric procedures.

The Endoscopic sleeve gastroplasty (ESG), new to Australia is an endobariatric procedure which reduces the gastric lumen to a size comparable with the laparoscopic sleeve gastroplasty (LSG).



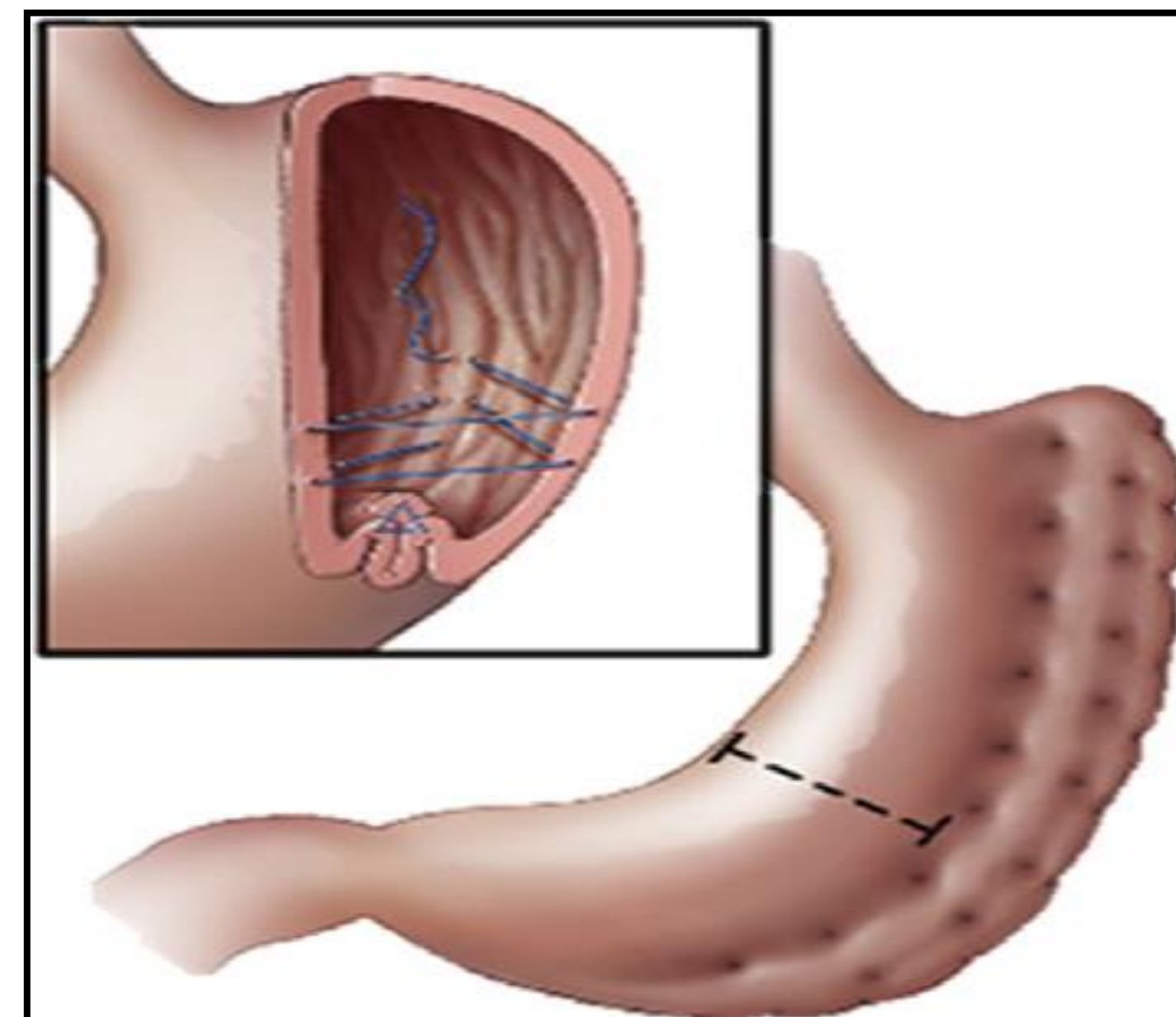
Purpose

To report the change in weight-related quality of life 6-months after a laparoscopic sleeve gastrectomy (LSG) or endoscopic sleeve gastroplasty (ESG).

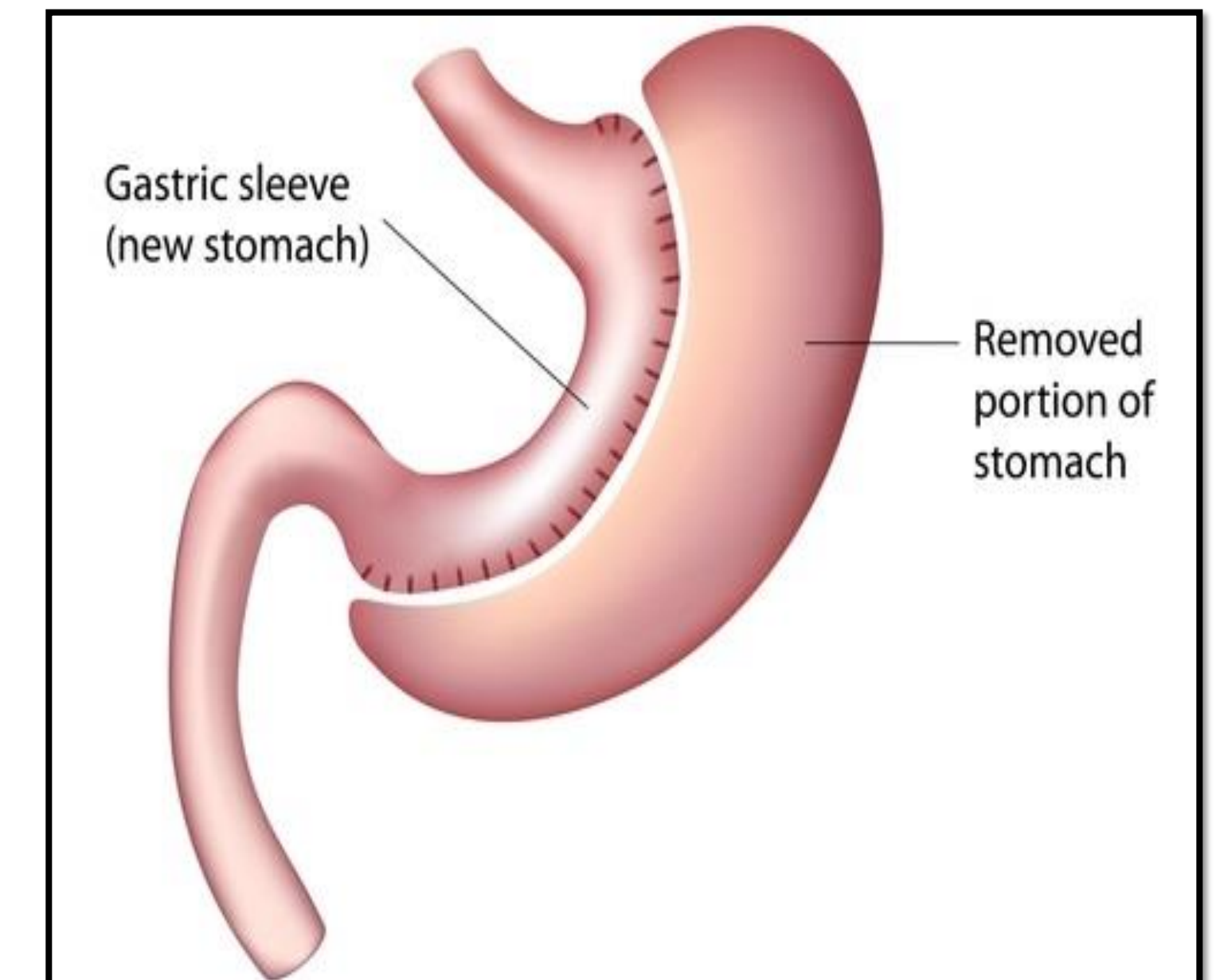
Methods & Demographic Results:

- Prospectively recruited over 12 months from a private bariatric surgery practice (Weightloss Solutions Australia) on the Gold Coast
- 12 LSG participants were aged 37.5 (6.7) years, baseline BMI 41.9 (6.2)kg/m², 92% female
- 6 ESG participants were aged age 35.0 (8.4) years, baseline BMI 37.1 (5.7)kg/m², 83% female
- Quality of Life was measured by the Impact Weight on Quality of Life Assessment Tool (IWQOL-Lite). This tool assesses overall and 5 sub-categories of quality of life: physical function, self-esteem, sexual life, public distress, work (or daily activities).
- All IWQOL scores were normalised to a scale of 0-100 quality of life. 0 being worst and 100 being best quality of life.

ESG



LSG



Quality of life of ESG and LSG patients in Queensland

At baseline, LSG (μ 42.6 (11.6) and ESG (μ 75.5)) patients reported severe weight-related impacts on QoL.

At baseline, LSG patients had a worse QoL compared to ESG patients ($p=0.027$).

At 6-months post-procedure, LSG had a greater improvement in QoL compared to the ESG (mean change 38.8 (19.8) $p<0.0001$ vs 15.6 (21.0) $p=0.142$).

The greater improvement in LSG compared to ESG was driven by self esteem (mean difference 36.6 [95% CI: 10.8,62.5] $p=0.008$) and sexual life (mean difference 45.7 [95%CI:17.8,73.5] $p=0.003$) domains.

Learnings

- ESG and LSG patients report severe weight-related impacts on their quality of life.
- LSG patients with BMI's had worse QoL
- Both LSG and ESG patients experienced improvements in QoL 6-months post-procedure
- LSG participants experienced a greater improvement compared to ESG to achieve similar levels of weight related QoL 6 months post procedure.

Quality of life scores of recruited participants

Variable	ESG (n=6)			LSG (n=12)		
	Baseline	6-months	Change	Baseline ^a	6-months	Change
Physical function	54.2 (24.1)	84.5 (14.0)	-30.3 (29) $p=0.051$	47.8 (18.5)	86.2 (10.6)	-38.5 (20.7) $p<0.0001$
Self-esteem	41.7 (28.8)	58.9 (24.5)	-17.3 (25.1) $p=0.153$	17.6 (13.5)	71.4 (16.5)	-53.9 (24.0) $p<0.0001$
Sexual life	74.0 (27.5)	63.5 (25.7)	10.4 (12.3) $p=0.093$	49.9 (23.7)	79.2 (14.7)	-35.2 (30.6) $p=0.002$
Public distress	74.2 (17.4)	82.5 (16.0)	-8.3 (25.8) $p=0.465$	47.9 (27.3)	82.1 (22.4)	-34.2 (28.0) $p=0.001$
Work	76.0 (9.2)	83.3 (19.2)	-7.3 (24.2) $p=0.493$	64.6 (20.2)	87.0 (18.0)	-22.4 (22.5) $p=0.005$
Total weight-related quality of life	60.0 (18.8)	75.5 (15.1)	-15.6 $p=0.142$	42.6 (11.6)	81.4 (12.1)	-38.8 (19.8) $p<0.0001$