

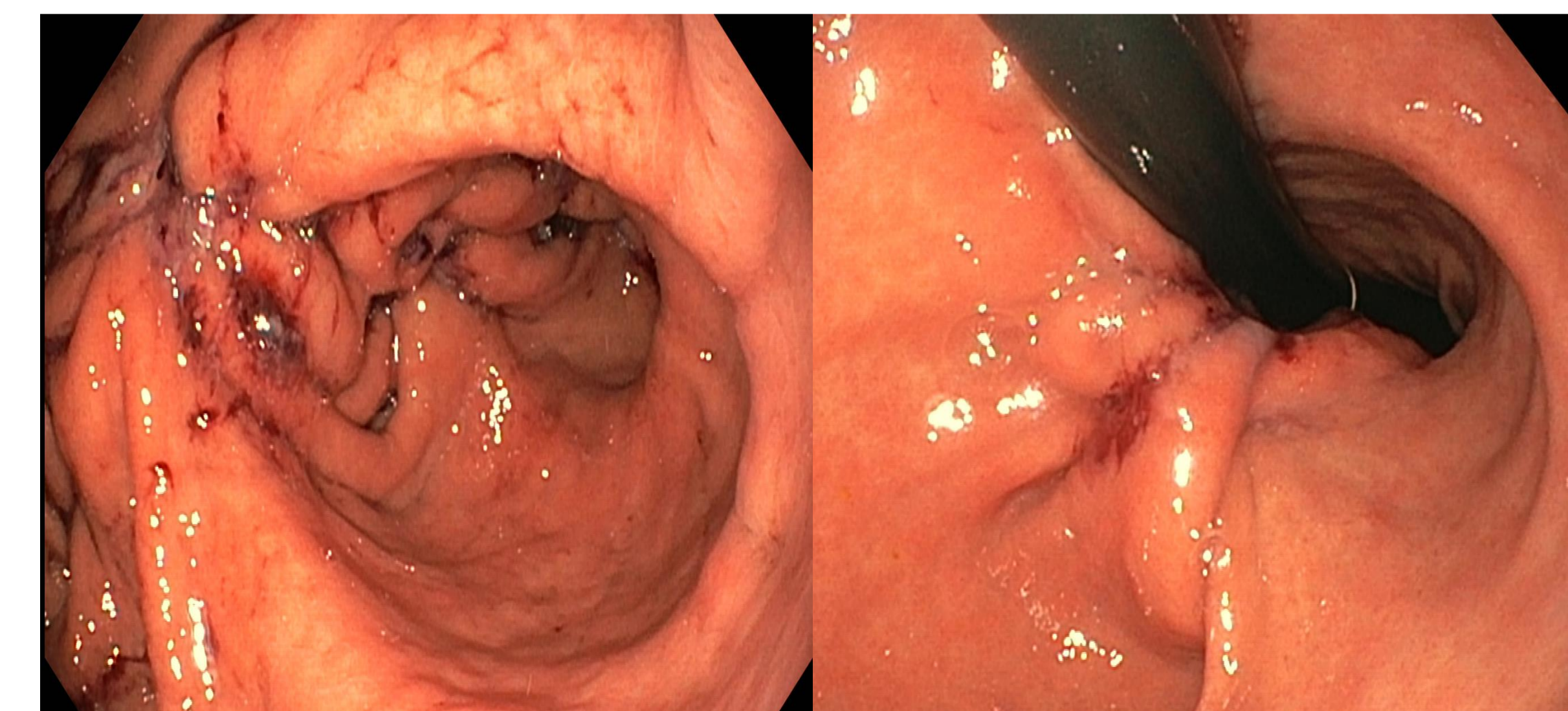
# Outcomes of Endoscopic Sleeve Gastroplasty in the Elder Population

Matteo Maria Valeria <sup>1,2</sup>, Bove Vincenzo <sup>1,2</sup>, Pontecorvi Valerio <sup>1,2</sup>, De Siena Martina <sup>1,2</sup>, Ciasca Gabriele <sup>1</sup>, Carlino Giorgio <sup>3</sup>, Giannetti Giulia <sup>1,2</sup>, Antonini Nausicaa <sup>1,2</sup>, Massari Chiara <sup>1,2</sup>, Papi Massimiliano <sup>1</sup>, Costamagna Guido <sup>1,2</sup>, Boskoski Ivo <sup>1,2</sup>

<sup>1</sup> Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy; <sup>2</sup> Centre for Endoscopic Research Therapeutics and Training (CERTT), Università Cattolica del Sacro Cuore, Rome, Italy; <sup>3</sup> University of L'Aquila, L'Aquila, Italy

## BACKGROUND AND AIM

With the ageing of the population and the epidemic spread of obesity, the frequency of older individuals with obesity is steadily growing. To date, no data evaluating the use of endoscopic sleeve gastroplasty (ESG) in the elderly have been published. Endoscopic sleeve gastroplasty (ESG) is a transoral procedure that mimics the restrictive bariatric surgery by placing full-thickness sutures along the greater curvature of the gastric body (Figure 1). In this case series, we evaluate the short and medium-term outcomes of ESG in patients with obesity aged 65 years and older.



Endoscopic appearance of the stomach after ESG

## MATERIALS AND METHODS

A retrospective analysis was done on a prospective database reporting patients that underwent ESG between November 2017 and July 2021; patients aged 65 years and older were included in our analysis. %EWL, %TBWL, the Bariatric Analysis and Reporting Outcome System (BAROS) questionnaire and the presence of comorbidities were recorded during follow-up.

## RESULTS

18/ 271 ESG patients  $\geq$  65 years; Median age 67 years (65-75); Mean BMI 41.2 kg/m<sup>2</sup> (32.1-50.2)

No periprocedural adverse events occurred.

All patients reported excellent satiety and QoL improvement.

At 12 months: 6/12 patients with arterial hypertension and 3/4 with diabetes reduced or removed their drugs; 2/6 patients with OSA stopped therapy with CPAP.

Variable	6 months	12 months	24 months	p-value #
EWL%	39 (34-45)	37 (30-49)	41 (34-48)	0.034
TBWL%	15.1 (10.9-18.8)	15.5 (10.5-19.6)	15.5 (9.6-21.6)	0.009
BAROS score	3.0 (2.3-3.9)	3.4 (2.4-3.9)	2.5 (2.1-3.4)	0.2

Values reported as Median (Q1-Q3); #Kruskall Wallis test

## CONCLUSIONS

According to our experience, ESG is a promising therapeutic option for elder individuals with obesity that are unable to lose weight with non-invasive methods, and who refuse or are deemed not suitable for bariatric surgery because of elevated age and comorbidities.