



XXVI IFSO WORLD CONGRESS OF BARIATRIC & METABOLIC SURGERY

Recurrent Weight Regain After

RYGBypass

Does Reducing the Anastomosis Size Helps?

Caetano Marchesini

Former President of the Brazilian Society for Bariatric and Metabolic Surgery

Member of The Brazilian College of Surgeons

Member of IFSO

International Member of ASMBS



Disclosures

The following planner of this CME activity has financial relationships with commercial interest to disclose:

Medtronic™ – Advisory Board for Brazil & Latin America

MSD™ - Speaker

Abbott - Advisory Board

Eurofarma™ - consultant

Novo Nordisk™ - speaker

Vifor Pharma™ - speaker

There will always exist

- *Non responders*
- *Recurrent disease*
- *Persistent disease*
- *Complications of therapy*

OBEESITY

complex, multifactorial disease

CHALLENGES

developing **adequate treatment** options

and strategies for **long-term management**

which must be **Multimodal**



Weight Regain

Even More Complex

“ The clinical problem of WR after bariatric surgery is poorly and inconsistently assessed and reported ”



**It's not only
about the
Surgery**



**There's
much more**

ENERGY & BALANCE



Intake

Hunger
Satiating
Satiating/return to hunger
Emotional eating

Expenditure

Resting Energy
Expenditure
Physical activity (NEAT)
Exercise

GENETIC

The "thrifty" gene hypothesis took over the energy-guzzling genes

James V Neel, 1962

The "drifty gene hypothesis" random drift of obesity genes

John Roger Speakman, 2007

Epigenetic modifications



Neural Pathways and Systems Controlling Ingestive Behavior and Energy Balance

Visual, Olfactory & Auditory Stimuli and Cues

Cortico-limbic Systems

Reward, Learning & Memory, Executive Control

Hypothalamus

Master nutrient sensor Incentive motivation

Hindbrain

Oromotor & autonomic controls, Satiety

Foraging & Procurement

Ingest choose, select stop, reject

Taste

Gut

Absorbed and Stored Nutrients

Endocrine & Autonomic Outflow

leptin, ghrelin
insulin, glucose
neural signals > nutritional status

AGRP/NPY & POMC/CART



Adjuvant Therapies

Revisional
Surgery

Pouch
Outlet
Small Bowel

Endoscopic
Approach

Pouch
Outlet APC
Suture



TORe

Transoral Outlet Reduction

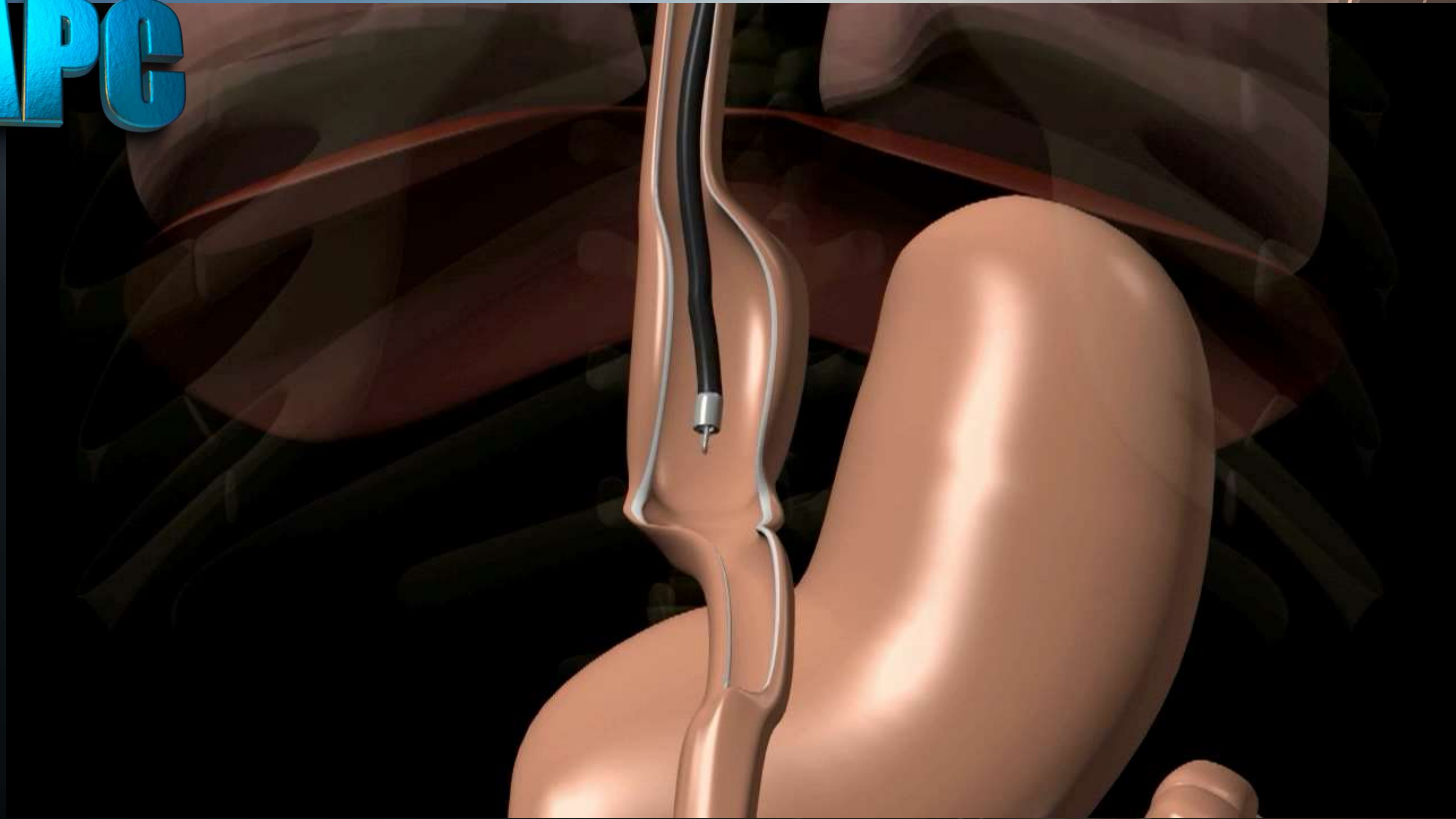
Endoscopic argon plasma coagulation vs. multidisciplinary evaluation

De Quadros LG; Galvão Neto MP; Teixeira A; Marchesini JC; Grecco E; Kaiser Júnior RL; Zotarelli Filho I; Souza T; Concon Filho A ; de Santana M; Silva L; Ramos, AC; Ferraz A; Campos JM

Methods

- ✔ **Group 1:**
APC on the GJ anastomosis + MD team
- ✔ **Group 2:**
Sham Endoscopy + MD team
- ✔ **Cross over on the 6th month**

APC



Trial design

144



42

Patients



Multi
Disciplinary
Team



Random
Selection



outlet size 10/14mm
or early satiety

22



Endoscopy
each 2 months
Until 14th month



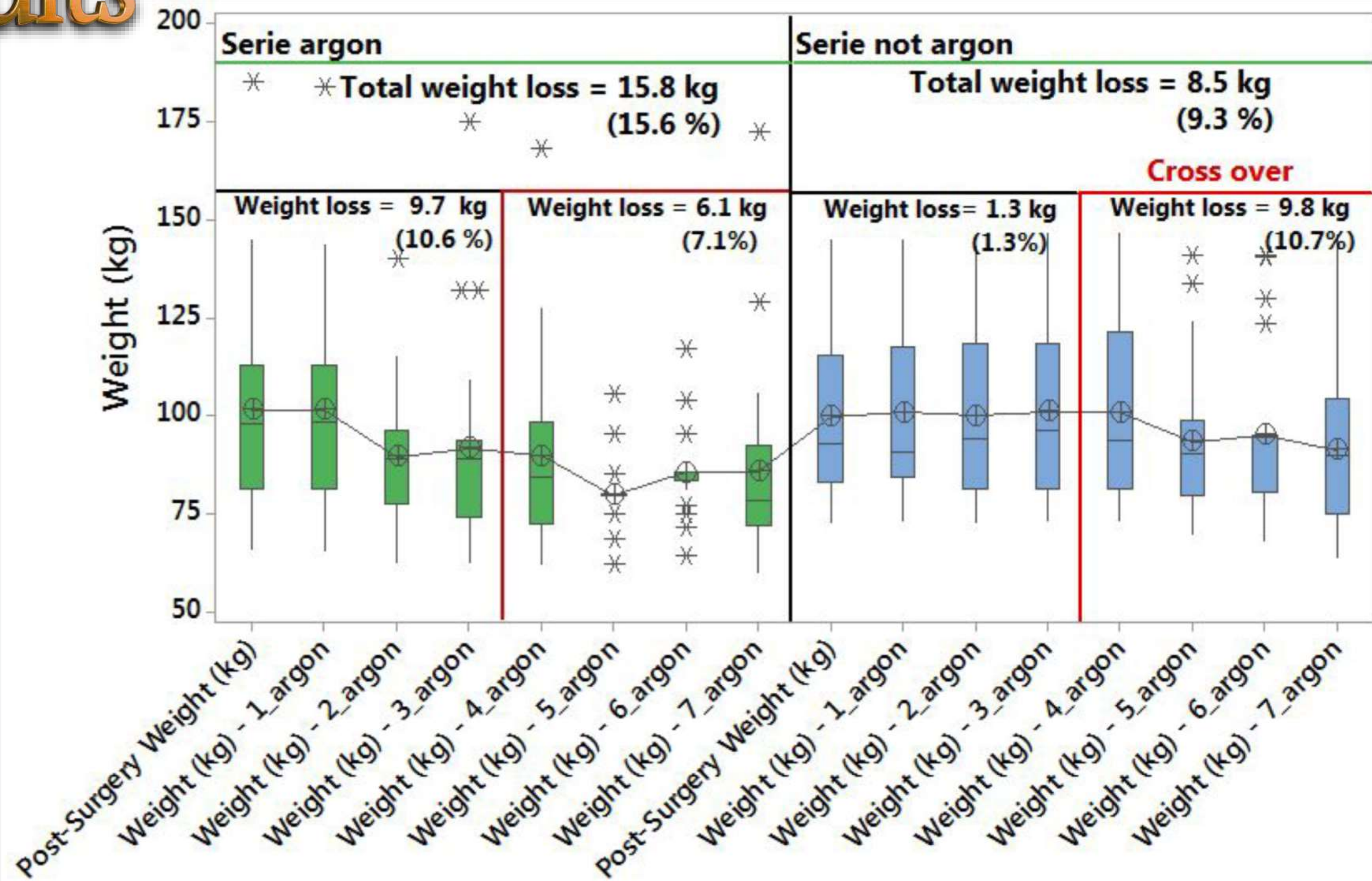
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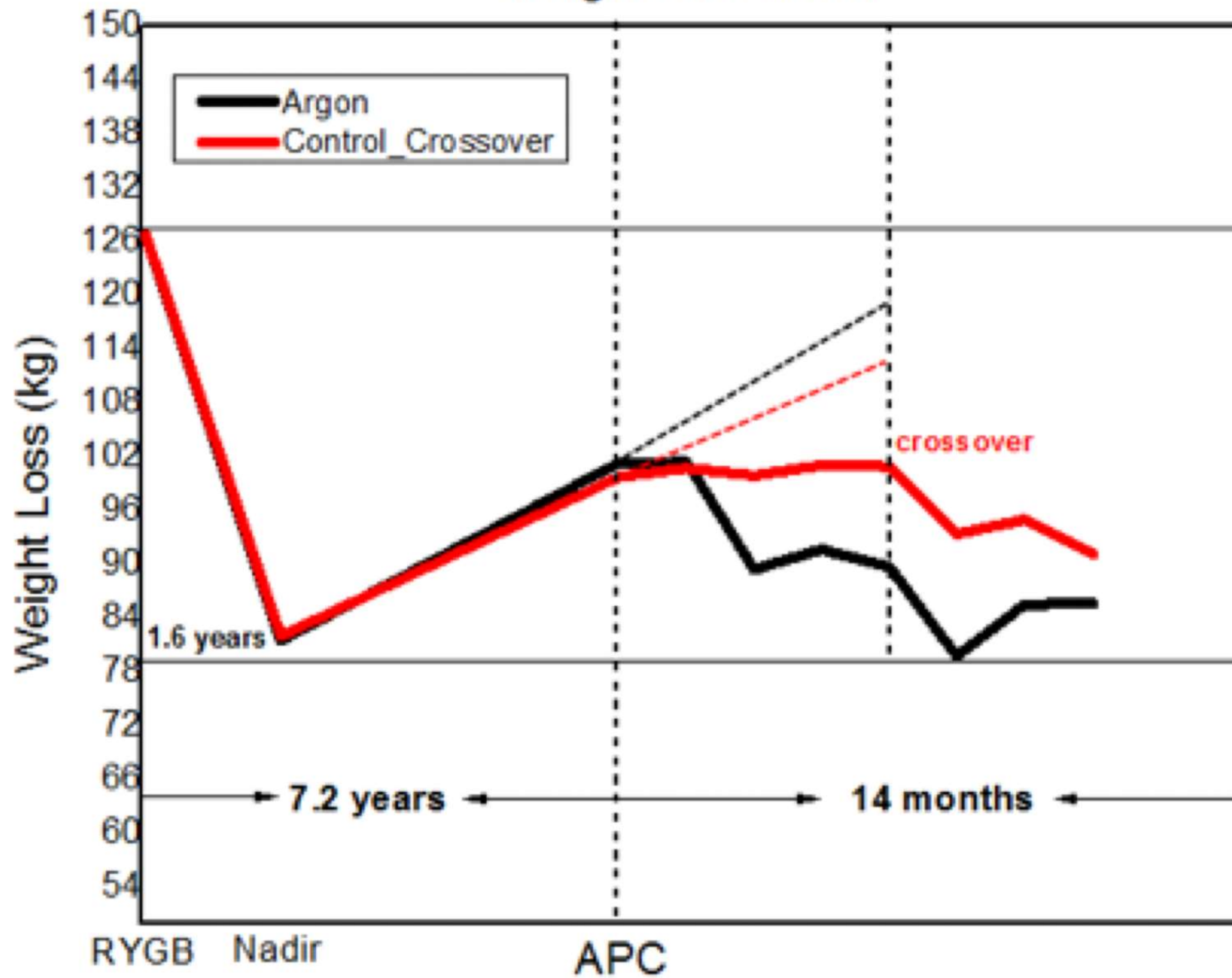
Multi
Disciplinary
Team

6 months
Crossover

Results



Weight Loss Trend



Efficacy of Utilizing Argon Plasma Coagulation for V

- The mean weight loss was 6.5, 7.7, and 8.3 kg at 6, 12, and 24 months, respectively, and the changes in weight over time was statistically significant.

5.4%

Complications
333 patients


Stenosis (n = 9),
GJ ulcer (n = 3),
Vomiting (n = 3),
GJ perforation (n = 2)
Melena (n = 1)

**All complications were treated conservatively or via endoscopy.



Long-term Outcomes of Transoral Outlet Reduction (TORe) for Dumping Syndrome and Weight Regain After Roux-en-Y Gastric Bypass



Valerio Pontecorvi^{1,2} · Maria Valeria Matteo^{1,2}  · Vincenzo Bove^{1,2} · Martina De Siena^{1,2} · Giulia Giannetti^{1,2} · Giorgio Carlino^{1,2} · Giulia Polidori³ · Laila Vinti³ · Giulia Angelini⁴ · Amerigo Iaconelli⁴ · Pietro Familiari^{1,2} · Marco Raffaelli⁵ · Guido Costamagna^{1,2} · Ivo Boškoski^{1,2}

Followup

87/76

6months (100%) / 12 months (87.4%)

56

24 months (64.4%)

Dumping Syndrome

- The median Sigstad's score dropped from 15 (11–8.5) pre-operatively to 2 (0–12) at 24 months. (DS ≥ 7)

Weight Loss

- The %TBWL was 10.5%, 9.9%, and 8.1% at 6, 12, and 24 months, respectively - regaining weight after 24 months
- “Dumpers” with resolution of DS showed better weight loss results compared with those with persistent DS ($p < 0.001$).
- The only adverse event observed was a perigastric fluid collection successfully managed conservatively.

Five-year results of endoscopic gastrojejunostomy revision (transoral outlet reduction) for weight gain after gastric bypass

Zachary M. Callahan · Bailey Su · Kristine Kuchta · John Linn · JoAnn Carbray · Michael Ujiki

Table 3 Weight loss and percent excess body weight loss after EGJR

	Sample size	Weight loss (kg)	Percent excess body weight loss (% ± SD)
Consult	70	0.0 ± 0.0	0.0 ± 0.0
EGJR	70	2.3 ± 5.7	3.5 ± 9.5
6 months	66	10.7 ± 11.6	18.5 ± 18.2
1 year	42	8.5 ± 11.5	14.9 ± 20.6
2 years	36	6.9 ± 10.7	12.2 ± 19.8
3 years	31	5.3 ± 9.1	8.7 ± 14.9
4 years	23	3.1 ± 12.0	3.2 ± 21.6
5 years	18	3.9 ± 13.1	7.0 ± 23.8

EGJR endoscopic gastrojejunostomy revision

On average, patients experienced weight loss after revision at all follow-up time points without resolution or development of medical comorbidities;

Dramatic weight loss was seen in the subgroup of patients who received a stoma reduction of greater than or equal to 85%;



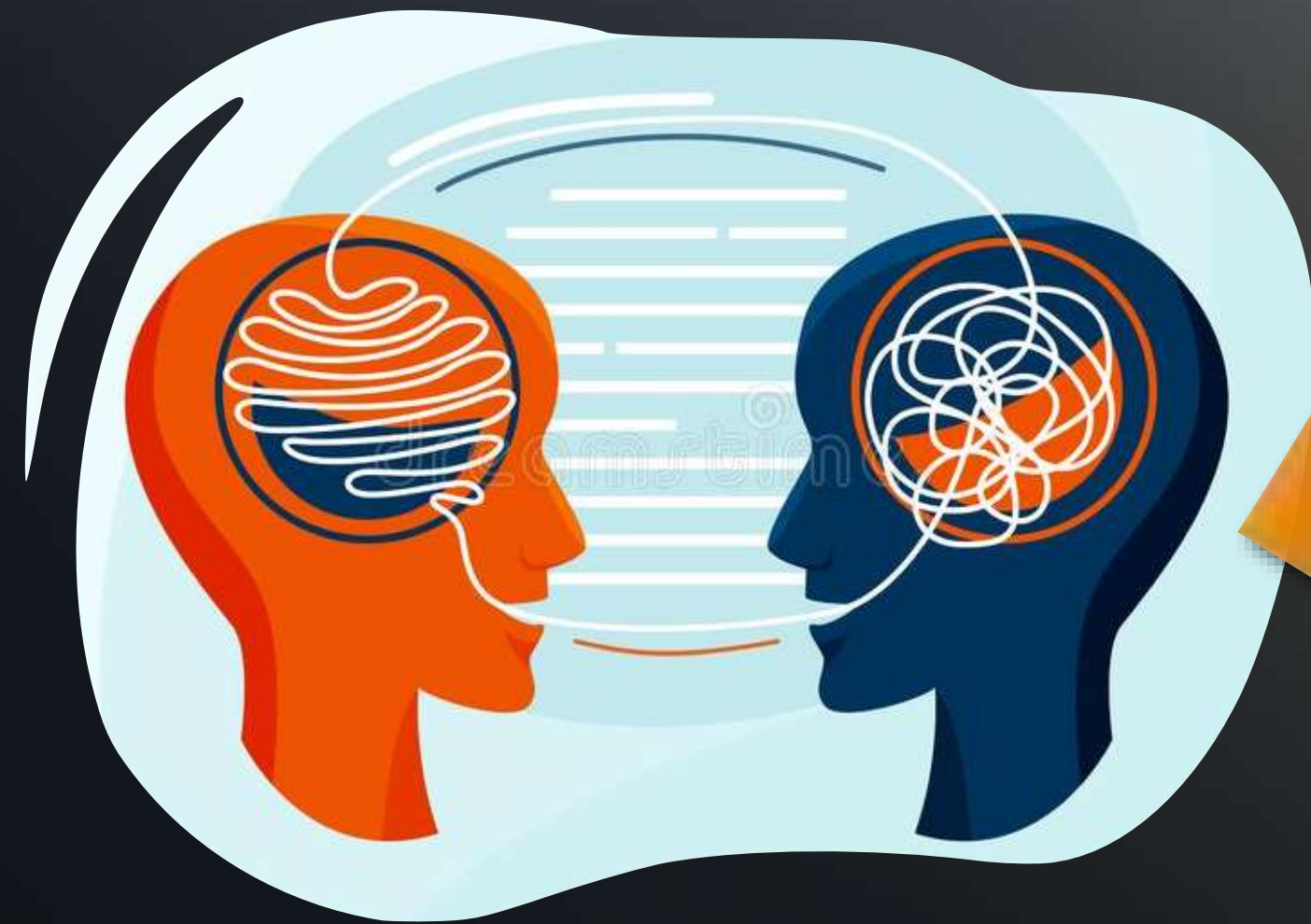
Endoscopic Approach

+

GLP1 Receptor Agonists

+

Psychiatric AOM



Psychological Therapy

**Bupropione / Naltrexone
Topiramate/Fentermine
Lisdexanfetamine**



Nutritional Counseling



Physical Activity

Concluding

Endoluminal techniques at present gives the patients an opportunity to alter their lifestyle and delay surgical revision or conversion to distal RYGB or biliopancreatic/ duodenal switch procedures

There is a general recommendation that the endoscopist must have advanced endoscopic skills before attempting EGJR

Often, surgeons find it challenging to incorporate re-interventions into their daily practice because it can mean a treatment failure or complications inherent to these procedures. But the practice of redoing procedures is a common part of the endoscopist's routine and endoscopic outlet reduction is part of this practice

The low quality of data limits the ability to demonstrate and support the long-term efficacy of endoluminal techniques in the management of weight regain following primary bariatric surgery

Does it Work?

**yes it
does
work**

In Patients with low BMIs so...

**Should we
do it in high
BMI patients?**



Grazie Mille