

Weight results in Endoscopic Gastroplasty Apollo type (A multidisciplinary approach)

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Abstract:

The rising epidemic of obesity and overweight is a big issue of public health that requires individual solutions, in a high percentage of patients, the most conservative techniques such as diet and exercise, combined or not with drugs, are offering an insufficient response to obesity health issue and in the other hand the surgery approach is too aggressive. Bariatric surgery has clearly shown its efficiency and benefits in patients with morbid obesity and type 2 obesity with comorbidities, in contrast in patients with less severe obesity (type 1 and 2 obesity without comorbidities) the surgery approach is maybe too aggressive and is usually rejected by patients. In response to this need emerge bariatric endoscopic gastroplasty Apollo type, one of the most promising techniques in the last years. This work has the aim of assessing the performance of the endoscopic gastroplasty accompanied of a yearly multidisciplinary follow-up of the subjects that undergoes the technique and endoscopic gastroplasty is developed as a safe and efficient technique for the treatment of obesity.

Keywords:

- Endoscopic Gastroplasty
- Gastroplasty Apollo Type
- Endoscopic gastroplasty results
- Multidisciplinary approach for weight lost

Goals

Endoscopic gastroplasty Apollo type accompanying this technique with an annual tracking in a multidisciplinary team constitute by a digestive doctor that makes presurgery consultation, performs the technique and follow its track, an endocrinologist that assess the adaptation of the technique and follows different visits during the track, a nutritionist that assists the patient before the technique is made following monthly visits to offer nutritional tips, readapt the patient habits and check anthropometric parameters and a psychologist that support the patient in their lifestyle change, as an answer that is offered to this health issue of obesity type 1 and 2 with no comorbidities refractory to more conservative treatments. All program is funded by the patient and there is no coverage by any medical insurance. Candidate

patients to receive endoscopic gastroplasty present obesity type 1 and 2 in most of cases with no comorbidities. Patients who don't follow this criteria and potentially can benefit from Apollo Technique are presented in a multidisciplinary session which decides the convenience or not to carry on with the technique (in our samples the technique was made to a grade 2 long run evolution overweight female -BMI 29,53 Kg/m² and a young man with morbid obesity BMI 42,7 Kg/m²) Consequence of the need to assess our performance and potential results to detect possible points to implement improvements and communicate results this work is made for. Patients and methods: Retrospectively weighting and analyzing the results of 19 patients subject to endoscopic gastroplasty between October 2017 and February 2019.

All patients have concluded the monitoring year in February 2020. Endoscopic gastroplasty is made in a multidisciplinary context composed by Digestive, Endocrinologist, Nutritionist and Psychologist. The program lasts for one year. All patients included in this study have been tracking by the same multidisciplinary team. Among these 19 patients, 13 are women, representing 68,4% of the sample, 6 are men (31,6% of the sample). Average in the age group is 41,57 +/-13,04, average in women age group is 42,38 +/-13 and in men group is 43,16+/-14,33. Weighted data were collected in the 3, 6 and 12 months after the endoscopic gastroplasty and were registered in Excel chart. These data were analyzed with a scientific calculator Casio model fx 115 MS S-V.P.A.M.

Results

The percentage of overweight lost at 12 months of follow-up, taking as a reference the upper limit of normality of normal weight (BMI = 25 Kg / m²) of the total sample was 54.2% +/- 29.7% (Women: 56.99% +/- 29.76%; Men: 49.17% +/- 27.66%). In addition, the excess BMI lost is calculated in the patients who complete the follow-up, obtaining a percentage of the excess BMI lost in the sample of 53.94% +/- 29.50% (Women: 56.97% +/- 29.78%; Males: 48.29% +/- 28.34%). At the end of the program, the patients lost an average of 18.67 Kg of weight with a standard deviation of 10.45 Kg (Women: 16.44 Kg +/- 9.4 Kg; Men: 22.7 Kg +/- 11, 07 Kg). From the point of view of the multidisciplinary team, there have been no serious complications, there has only been insufficient weight loss in one of the patients who had adequate adherence to the program and who, despite claiming to follow the recommendations and attend all visits with the specialists only achieved a weight loss of 2.9 kg (11% loss of overweight, taking as a reference the upper limit of normality for normal weight). We have had 2 cases of patients dissatisfied with the results of the technique for presenting satiety below the initial expectations about the intervention (the two oldest women in the sample, one of them 62 years old and the other 70 years old) although in both cases the loss of overweight has been greater than 30% at the end of the one-year follow-up (in one case a loss of overweight was achieved taking as a reference a BMI = 25 Kg / m² of 31.25% - loss of 10.5 Kg of weight - and in the other case of 37% - loss of 11 Kg of weight).

	PORCENTAJE DEL SOBREPESO PERDIDO DE LOS 12 MESES CON REFERENCIA AL PESO IDEAL	PORCENTAJE DEL SOBREPESO PERDIDO DE LOS 12 MESES CON REFERENCIA AL LÍMITE SUPERIOR DE LA NORMALIDAD DEL NORMOPESO
TOTALES	42,4% +/- 24,08%	54,2% +/- 29,7%
VARONES	28,95% +/- 10,94%	56,99 +/- 29,76%
MUJERES	43,7% +/- 25%	49,17% +/- 27,66%

Conclusions

1. Gastroplasty via endoscopic Apollo type is a safe and effective technique for weight loss.
2. There is a good assess of patients to their tracking with the multidisciplinary team, in ourcase 73,68% of patients complete the tracking.
3. Advanced age and female gender are related with dissatisfaction with the results in the technique in our sample (sense of fullness under expectations).

Disclosures

Dra María Teresa Serrano Muñoz and. Francisco Zozaya Larrequi has no disclosures. The rest of the authors are still working at the center where the program was conducted.

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