

# OUTCOMES OF GASTRIC BYPASS FOR MORBID OBESITY AFTER FIVE-YEAR FOLLOW UP

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## INTRODUCTION

Currently, there are few data on long-term effects of bariatric surgery. We present the results of five-years of follow-up of a cohort of patients with gastric bypass surgery (GBP).

- To determine the prevalence of major comorbidities of morbid obese
- To evaluate the gastric bypass effect on this comorbidities, on ten-year estimated cardiovascular risk after five-year follow-up
- To assess the impact of bariatric surgery on the quality of life in these patients.

## METHODS

Prospective analysis in a cohort of 124 patients with morbid obesity who underwent bypass surgery between 2005 and 2009 where included. Demographic and anthropometric parameters, ten-year risk for coronary heart disease (estimated by Framingham Risk Score), complications from surgery and quality of life through BAROS (Bariatric Analysis and Reporting Outcome System) test were analyzed before surgery and during follow up.

## RESULTS

The mean age was 37.88±10.29 years, 76.6% were women. After five years of follow up, the percentage of weight lost was 68.31%. Remission of hypertension, dyslipidemia and diabetes mellitus type 2 had occurred in 89.5%, 95.8% and 95.7% respectively (p<0.001). Regarding surgical complications, 14.7% showed early complications and 29% late complications. BAROS test was successful in 95% of cases.

ANTHROPOMETRIC AND LABORATORY CHANGES AFTER FIVE-YEAR FOLLOW UP

	Baseline	At 2 year-follow up	At 5 year-follow up	Statistical significance
Weight (Kg)	137.64 ± 21.24	80.36 ± 13.29	82.16 ± 17	p = 0.001* p = 0.001** p = 0.01***
BMI (Kg/m <sup>2</sup> )	51.82 ± 7.35	30.42 ± 4.88	31.27 ± 7.08	p = 0.001* p = 0.02** p = 0.01***
%Weight loss		71.41 ± 16.6	68.24 ± 20.47	p = 0.001***
Glycemia (mg/dl)	116.17 ± 47.13	86. ± 14.43	87.81 ± 23.88	p = 0.001* p = 0.001** p = NS***
Cholesterol (mg/dl)	195.79 ± 40.11	138.04 ± 29.74	150.85 ± 37.15	p = 0.001* p = 0.001** p = NS***
cHDL (mg/dl)	44.72 ± 10.64	50.89 ± 12.44	60.19 ± 16.79	p = 0.001* p = NS** p = 0.001***
cLDL (mg/dl)	127.94 ± 33.7	71.63 ± 31.14	81.45 ± 33.39	p = 0.001* p = 0.03** p = NS***
Tryglicerides (mg/dl)	146.52 ± 82.37	87.69 ± 34.64	83.6 ± 29.2	p = 0.001* p = 0.001** p = NS***
Uric acid (mg/dl)	6.08 ± 1.77	4.67 ± 1.68	4.31 ± 1.51	p = 0.001* p = 0.02** p = NS***
HbA1C (%)	8.1 ± 2.01	6.37 ± 1.45	6.44 ± 1.28	p = 0.001* p = 0.05** p = NS***
Regicor (%)	3 ± 3	2 ± 0.09	2 ± 1.5	p = 0.001* p = 0.001** p = NS***
Framingham (%)	2 ± 3	1 ± 1.8	2.8 ± 3.5	p = NS* p = 0.001** p = NS

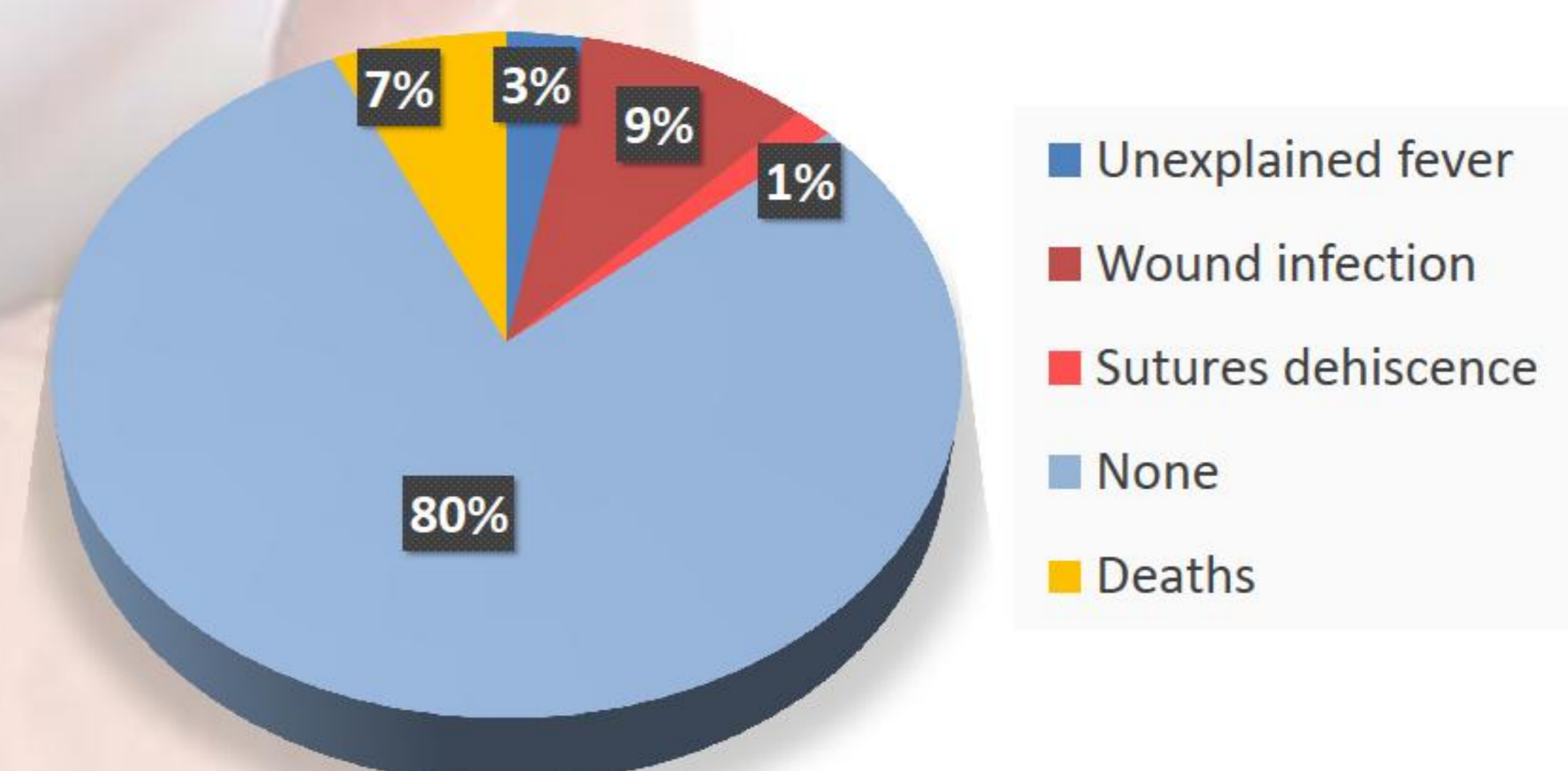
Comparison between different groups:

\*p (Baseline and 2year-follow-up group), \*\*p (Baseline and 5year-follow-up group), \*\*\*p (2year-follow-up and 5year-follow-up group)

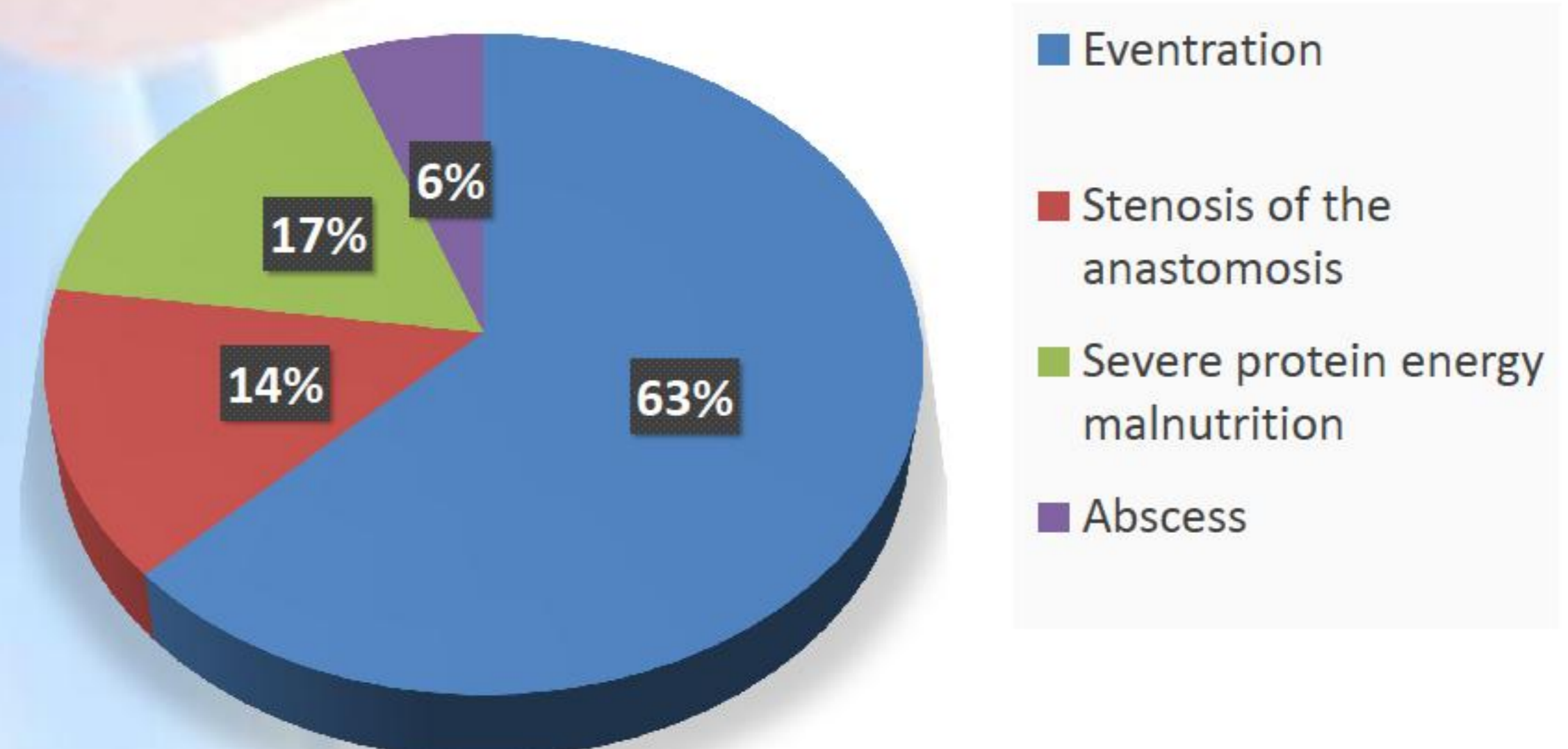
REMISSION RATE OF COMORBIDITIES AFTER FIVE-YEAR FOLLOW UP

COMORBIDITIES	Remission (%)	Statistical significance
Hypertension	89.5%	p < 0.001
Diabetes	95.8%	p < 0.001
Dyslipemia	95.7%	p = 0.015
Hyperuricemia	95.8%	NS

EARLY COMPLICATIONS



LATE COMPLICATIONS



## CONCLUSIONS

In our area, outcomes from gastric bypass in obtaining weight lost and resolution of comorbidities after two year of surgery also remains at five-year follow up with a minimum rate of surgical complications.

