#### CENTER OF EXCELLENCE FOR THE STUDY AND OBESITY TREATMENT





# Laparoscopic One Anastomosis Gastric Bypass (LOAGB) " How I do it "

Concepts and Results in a series of 11-years experience with 2,200 patients

### Miguel-A. Carbajo Caballero

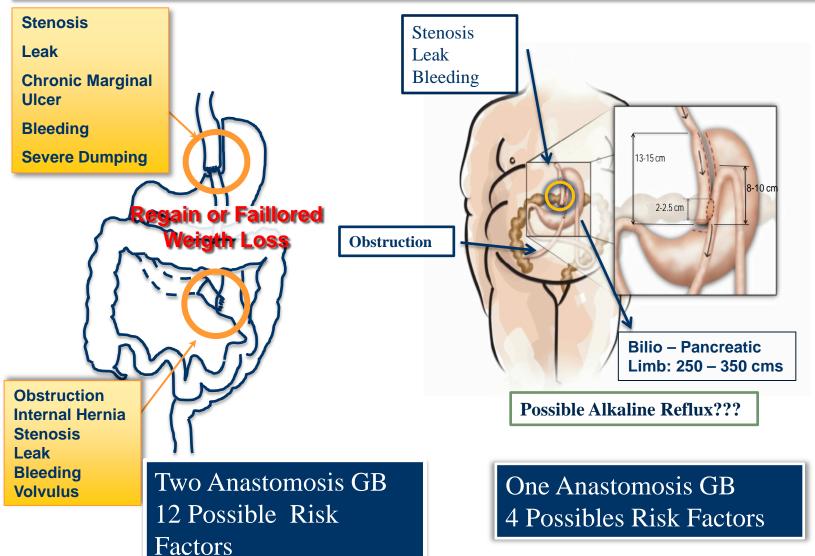
Director of the Center of Excellence of the Surgery of Obesity and Metabolic Diseases.

Hospital Campo Grande, Valladolid, España





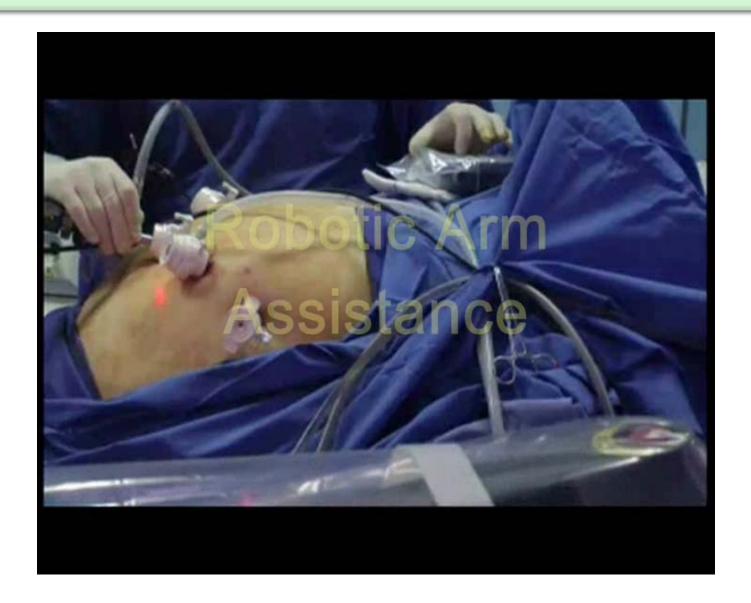
# Minimising the Inter and Postoperative Risks of Gastric Bypass







# One Anastomosis Gastric Bypass by Iaparoscopy and robotic assistant







### One Anastomosis Gastric Bypass by Iaparoscopy and robotic assistant

#### **KEY STEPS OF THE PROCEDURE**

- 1. INTESTINAL LOOP between 200 to 350 cm.
- 2. HISS ANGLE TOTALLY OPENED.
- 3. GASTRIC POUCH, 13 to 15 cm. Length, and 25-30 cc. Capacity (calibrated with a 36 French tube), and Radical dissection of the posterior gastric wall
- 4. ANTI-REFLUX MECHANISM, afferent loop suspended 8-10 cm to the gastric pouch.
- 5. GASTRO-ILEAL ANASTOMOSIS, 2 to 2.5 cm. width.





# Laparoscopic One Anastomosis Gastric Bypass: 11-Year Experience in 2,200 patients

### **Patients Characteristics (June 2002 to February 2013)**

Age		<b>43</b> (12 - 74)	
Gender	Female	<b>1353</b> (61.5%)	
	Male	<b>847</b> (38.5%)	
ВМІ		<b>46</b> (31 - 86)	
EBW (kg)		<b>65</b> (28 - 220)	





# Laparoscopic One Anastomosis Gastric Bypass: 11 - Year Experience in 2,200 patients

#### **Patients Characteristics**

Primary Surgery	<b>1271</b> (57.7%)	
Previous Open Surgery	<b>524</b> (23.8%)	
Associated Procedures	<b>360</b> (16.3%)	
Previous Bariatric Procedures	<b>45</b> (2.1%)	





# Laparoscopic One Anastomosis Gastric Bypass: 11 - Year Experience in 2,200 patients

### **Hospital stay**

Heavital Stay	Uncomplicated patients	2.167 (98.50%) 1 day (15-120 h.)
Hospital Stay	Major Complications	33 <b>(1.50%)</b> 9 days (4-32 d.)





# Laparoscopic One Anastomosis Gastric Bypass: Our Experience in 2,200 patients

### **Late Complications**

Gastro-intestinal	Pneumatic Dilatation	7 (0.32%)
stenosis 9 (0.40%)	Prosthesis	2 (0.09%)
Acute Anastomosis Ulcer 8 (0.36%)	<b>Medical Treatment</b>	8 (0.36%)
Malnutrition	Medical treatment	12 (0.55%)
Tiamina deficit	Medical treatment	1 (0.04%)
Revisional surgery	0 (0%)	0 (0 %)
TOTAL		30 ( 1.36%)





# Laparoscopic One Anastomosis Gastric Bypass: Our Experience in 2,200 patients

### **Weight Loss**

	1 year	84% (55 -112%)
	2 year	88% (58 – 115%)
	3 year	81% (55 – 103%)
Percent of mean EWL at:	4 year	79% (51 – 102%)
	5 year	77% (48 – 100%)
	10 year	70% (46 – 98%)





# Laparoscopic One Anastomosis Gastric Bypass: Our Experience in 2,200 patients

### **Severe Comorbidities Resolution Index**

Dyslipidemia	96 %	
Type 2 Diabetes	92 %	
Arterial Hipertension	90 %	
Sleep Apnea	99 %	





# Laparoscopic One Anastomosis Gastric Bypass: 11 Year Experience in 2,200 patients

### Postop. Endoscopic Studies at 5-Year Follow-Up

Postoperative UGI endoscopic (control) studies were planned for all patients completing at list 5-year follow-up.

1.090 patients completed at list 5-Year Follow-up 265 (24.5%), accepted underwent UGI endoscopic studies

### **Results:** NO significant acute or chronic lesions were found:

- . Endoscopic findings not shown chronic marginal ulcer, erosive esophagitis, or severe alkaline reflux.
- . Minor or middle sign of pouch gastritis were found in 21 patients (7.9%)
- . H. Pylory was diagnosis in 9 patients (3.4%)

UGI: upper gastrointestinal





### **IFSO- European Database Control**

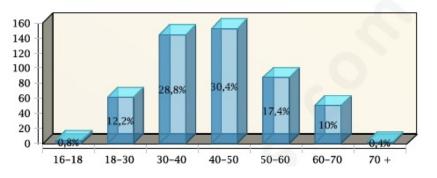
(Since January 2010)





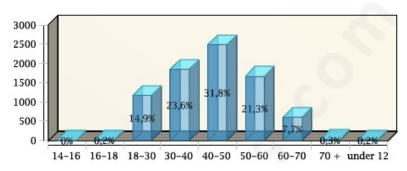
#### **Primary Charts**

#### Age distribution



#### **Primary Charts of Gastric By Pass**

#### Age distribution



**TOTAL OPERATIONS 500** 

LOAGB

**TOTAL OPERATIONS 7200** 





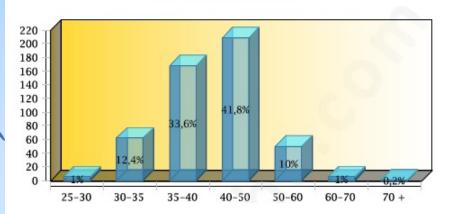
### **IFSO- European Database Control**

(Since January 2010)



**Primary Charts** 

#### **BMI** distribution



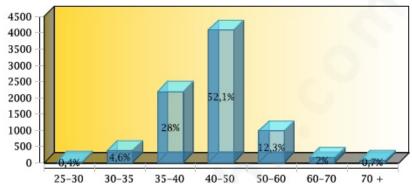
TOTAL OPERATIONS 500

**LOAGB** 



**Primary Charts of Gastric By Pass** 

**BMI** distribution



**TOTAL OPERATIONS 7200** 





### **IFSO- European Database Control**

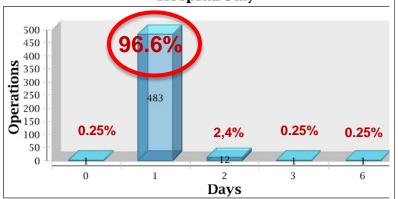
(Since January 2010)





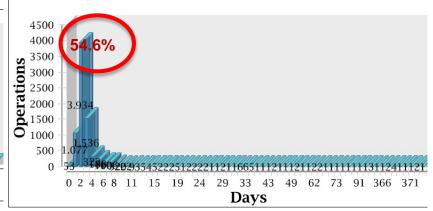
#### **Primary Charts**

**Hospital Stay** 



Primary Charts of Gastric By Pass

#### **Hospital Stay**



**TOTAL OPERATIONS 500** 

LOAGB

**TOTAL OPERATIONS 7200** 





(Since January 2010)





**Primary Charts** 

0.2%

Primary Charts of Gastric By Pass

Operative Outcome complications

Operative Outcome complications

	Complications	Total	Percenta
1	Bleeding	1	0.2%

	Complications	Total	Percentag
1	Anastomotic Stricture	2	0.03%
2	Bleeding	19	0.24%
3	General Complications	4	0.05%
4	Intra abdominal abscess	1	0.01%
5	Leak	2	0.03%
6	Other Compliactions	10	0.13%
7	Vomiting	4	0.05%
8	Wound infection	2	0.03%

**TOTAL OPERATIONS 500** 

LOAGB

**TOTAL OPERATIONS 7200** 





#### **IFSO- European Database Control**

(Since January 2010)





#### **Primary Charts**

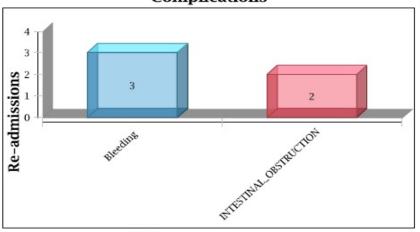
Re-admissions for early complications 1%

**Primary Charts** 

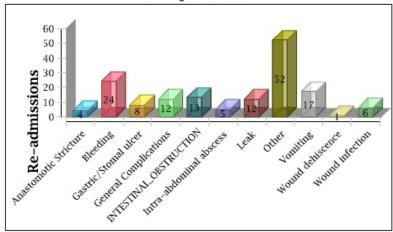
Re-admissions for early complications

2.1%

#### Complications







Total Complications:

5

Total Complications:

154

#### **TOTAL OPERATIONS 500**

LOAGB

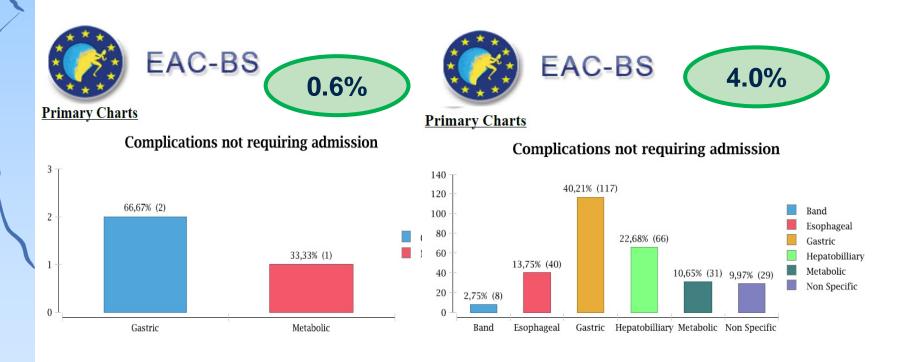
#### **TOTAL OPERATIONS 7200**





#### **IFSO- European Database Control**

(Since January 2010)



**TOTAL OPERATIONS 500** 

LOAGB

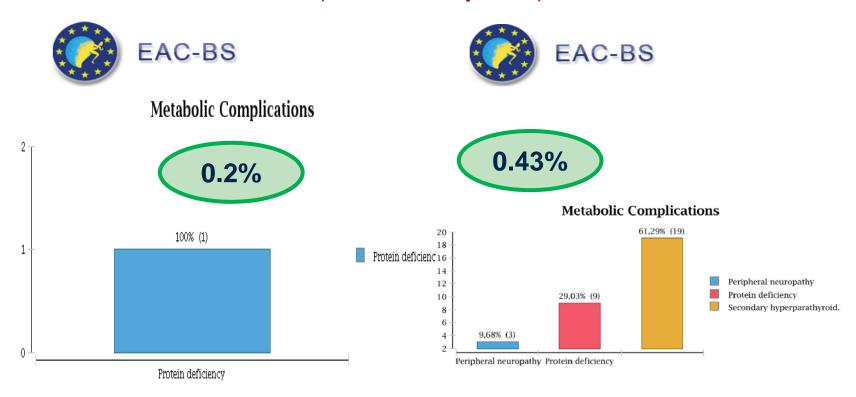
**TOTAL OPERATIONS 7200** 





### **IFSO- European Database Control**

(Since January 2010)



**TOTAL OPERATIONS 500** 

LOAGB

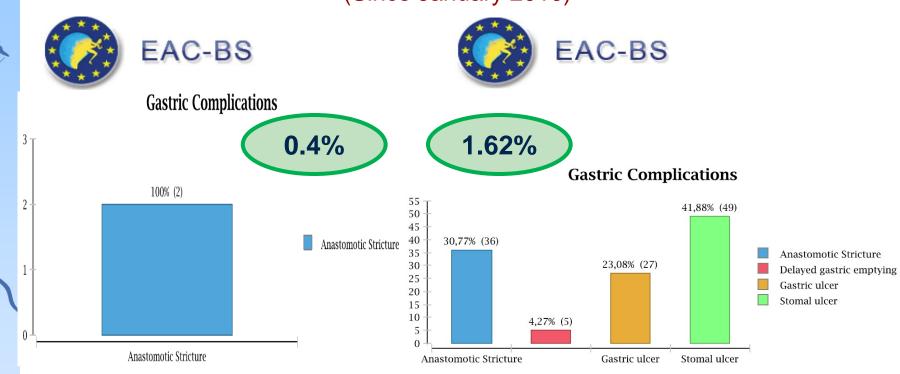
**TOTAL OPERATIONS 7200** 





#### **IFSO- European Database Control**

(Since January 2010)



#### **TOTAL OPERATIONS 500**

LOAGB

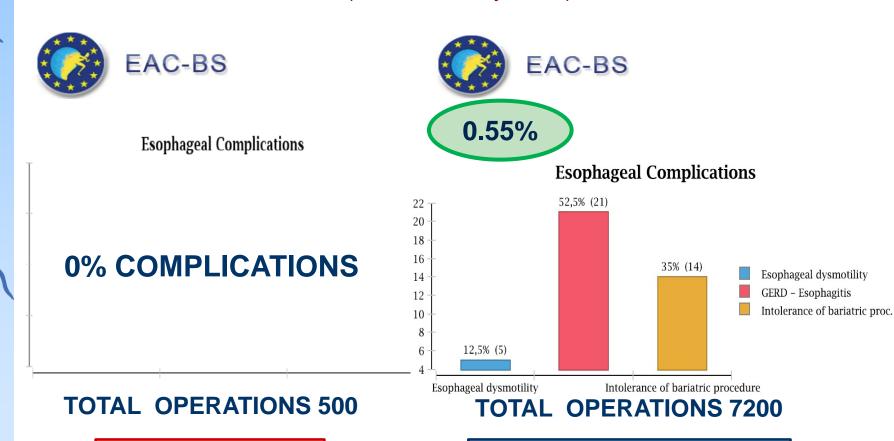
#### **TOTAL OPERATIONS 7200**





### **IFSO- European Database Control**

(Since January 2010)



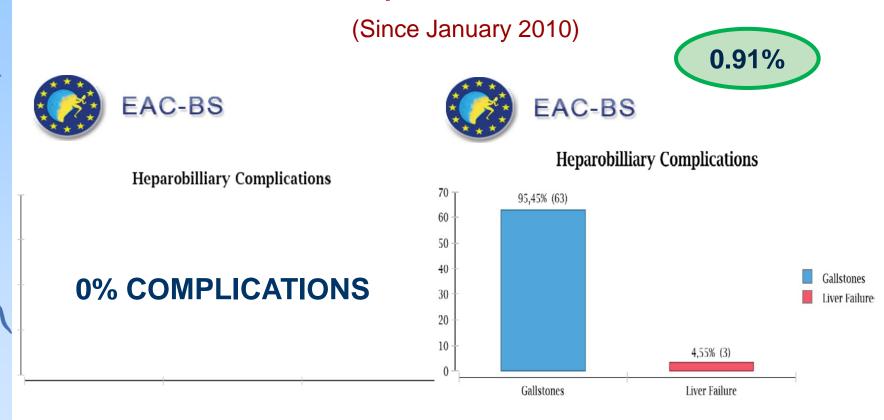
SRYGB (All Types)



LOAGB



### **IFSO- European Database Control**



**TOTAL OPERATIONS 500** 

**LOAGB** 

TOTAL OPERATIONS 7200





### **IFSO- European Database Control**

(Since January 2010)



Re-admissions for late complications

Complications

0% COMPLICATIONS

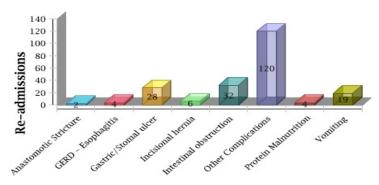


**Primary Charts** 

2.98%

Re-admissions for late complications

#### Complications



**TOTAL OPERATIONS 500** 

**LOAGB** 

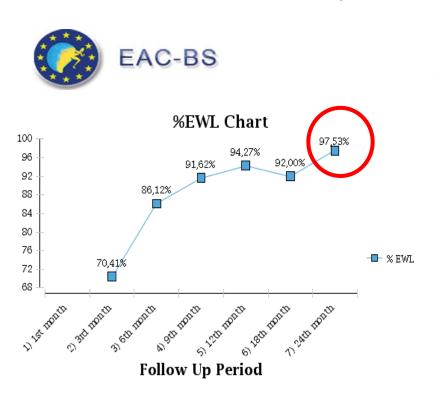
**TOTAL OPERATIONS 7200** 



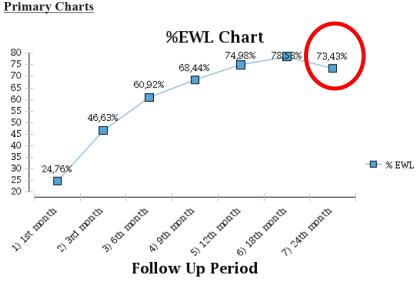


### **IFSO- European Database Control**

(Since January 2010)







#### **TOTAL OPERATIONS 500**

LOAGB

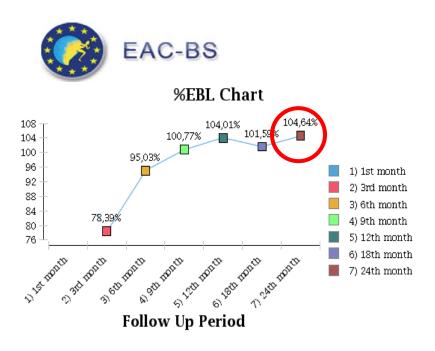
#### **TOTAL OPERATIONS 7200**





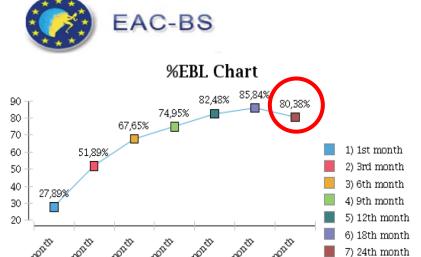
### **IFSO- European Database Control**

(Since January 2010)



**TOTAL OPERATIONS 500** 

**LOAGB** 



**TOTAL OPERATIONS 7200** 

Follow Up Period





### **CONCLUSIONS**

1. The LOAGB technique in our experience reduces the difficulty, operative time and length of hospital stay compared to other complex techniques; it also substantially decreases both early and late complication rates.





### **CONCLUSIONS**

2. The excellent results in our Long- time experience in regards to EWL, EBL, resolution of co-morbidities and quality of life (QOL) make LOAGB a safe and effective technique, and a powerful alternative for the treatment of morbid and super-morbid obesity after a 11-year experience.



# CENTER OF EXCELLENCE FOR THE STUDY AND OBESITY SURGERY TREATMENT



