Enhanced recovery in bariatric surgery.

Retrospective 6 month analysis after implementation in a tertiary care hospital. Clinical aspects.

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Introduction and objectives.

Obesity is a worldwide epidemic with increased clinical impact and healthcare expenses.

Application of an **enhanced recovery program in bariatric surgery (ERBS)** could permit to identify **individualized risk factors** and allow **perioperative optimization**. Adaptation to the local setting might be essential. However this aspect has been scarcely explored.

Our goal was to evaluate the results of the first 6 months after implementation of an ERBS. In this part we show the clinical aspects of the program implementation.

Methods.

Perioperative data of 44 consecutive patients (39 women) were analyzed. With the purpose of comparability of the results, the **Spanish national guidelines** were followed up: so, **process** and **results indicators**, as defined in the guidelines, were evaluated.

Compliance (%) with these items were reported, as recommended by the **Spanish Society for Obesity Surgery (SECO)**.

Table 1.

PROCESS INDICATORS	Implementation
Procedure adequacy	86.11 %
Cover adequacy	75.77 %
Preop information	100 %
Preop enhanced recovery item evaluation	74.66 %
Preop medication	95.08 %
Preop hydrocarbonated beverage	42.31 %
Thromboembolic prophylaxis	100 %
Antibiotic prophylaxis	100 %
Scheduled surgical approach	100 %
Restrictive fluid management	100 %
Hypothermia prophylaxis	100 %
Abdominal drains	30.77 %
Nasogastric tube	100.00 %
Optimal analgesia (VAS ≤ 4)	57.70 %
Preop nutritional support	100.00 %
Early mobilization	57.04 %
Mean	82.46%

Table 2.

RESULTS INDICATORS	Implementation
CLINICAL EFFECTIVENESS	
Re-operation due to bleeding	100 %
Unscheduled ICU admittance (first 24h)	100 %
Clinical guideline withdrawn	90.39 %
Early morbidity (<30 d)	97.22 %
Late morbidity (>30 d)	98.07 %
30 d mortality	100 %
Surgical site Infección (≤30 d)	97.22 %
EFFICIENCY	
LOS accomplishment (48-72h)	83.81 %
PATIENT SATISFACTION	
Very high-high satisfaction degree	90.38 %
Mean	95.23 %

Table 3.

	SECO recommendations	Results
Mortality	< 0.5%	0 %
Morbidity	General	< 10% 6.62 %
	Pulmonary thromboembolism	< 1.5% 0 %
	Fistulae	< 4% 0 %
	Intraabdominal herniation	< 3% 0 %
	Specific by technique	0 %
	VG	Leaks 0-3.9% 0 %
		Staple line bleeding 0-9% 0 %
	RYGBP	0 %
	Manual suture	Dehiscence 0.22-1% 0 %
		Staple line bleeding 0.4-0.6% 0 %
	Mechanic circular	Dehiscence 0-6.6% 0 %
		Anastomotic bleeding 1.6-6.6% 1.92 %

Results.

Mean (SD) patients' **age** was **52.19** (6.34) yo, **BMI 46.22** (6.29) kg/m2. One patient was excluded of follow-up due to severe comorbidities.

Type of surgery: **35** Roux-en-Y gastric bypass (**RYGBP**), **17** vertical gastrectomies (**VG**), and **2** single duodeno-ileal anastomosis with sleeve gastrectomy (**SADIS**) through laparoscopic approach. Four cases were revision surgeries (2 RYGBP, 2 SADIS). In **tables 1-2** the implementation of the indicators is showed.

Six month mean compliance was **88.85%** (82.46% process indicators, 95.23% results indicators). Two patients were excluded due to complications. The **SECO morbi-mortality quality objectives** were **100%** achieved (**table 3**).

Conclusions.

Clinical guidelines use to approach **high volume-high risk-high cost medical procedures**. In addition **multidisciplinary management** is usually required. In this setting, **perioperative interventions** should be **evidence-based** and **adapted to the local scenario**.

Our results are encouraging regarding compliance with the **national and international enhanced recovery guidelines** and **bariatric surgery societies recommendations**, and its **local adaptation**.