

# Impact of bariatric surgery on depression and body image: short-term results

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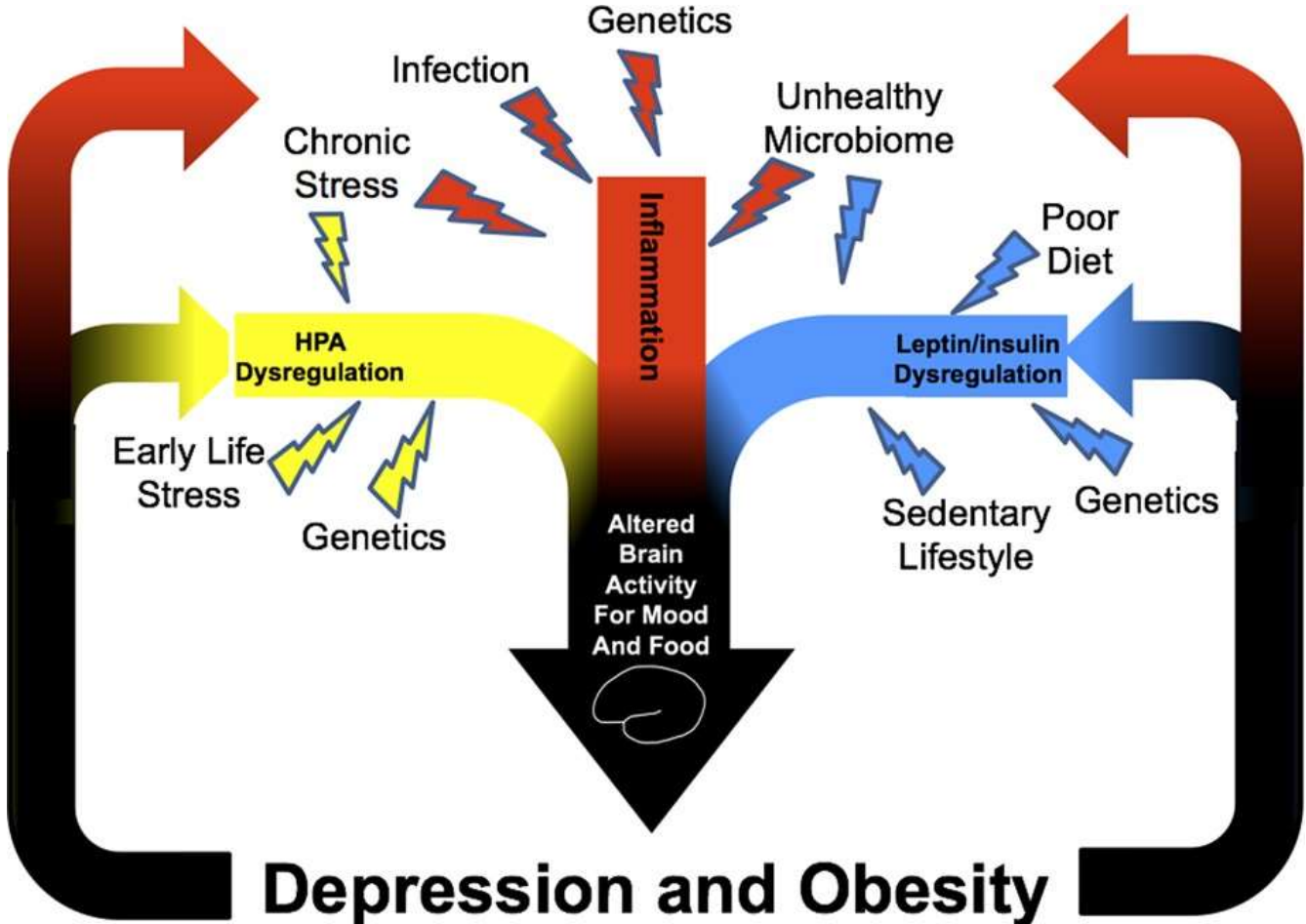
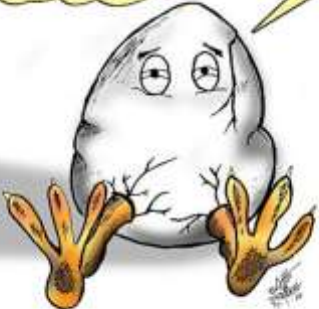
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OBSESITY AND DEPRESSION

Which Came First -- Obesity or Depression??  
It's hard to say, but thinking about it...  
is depressing!



Depression and Obesity

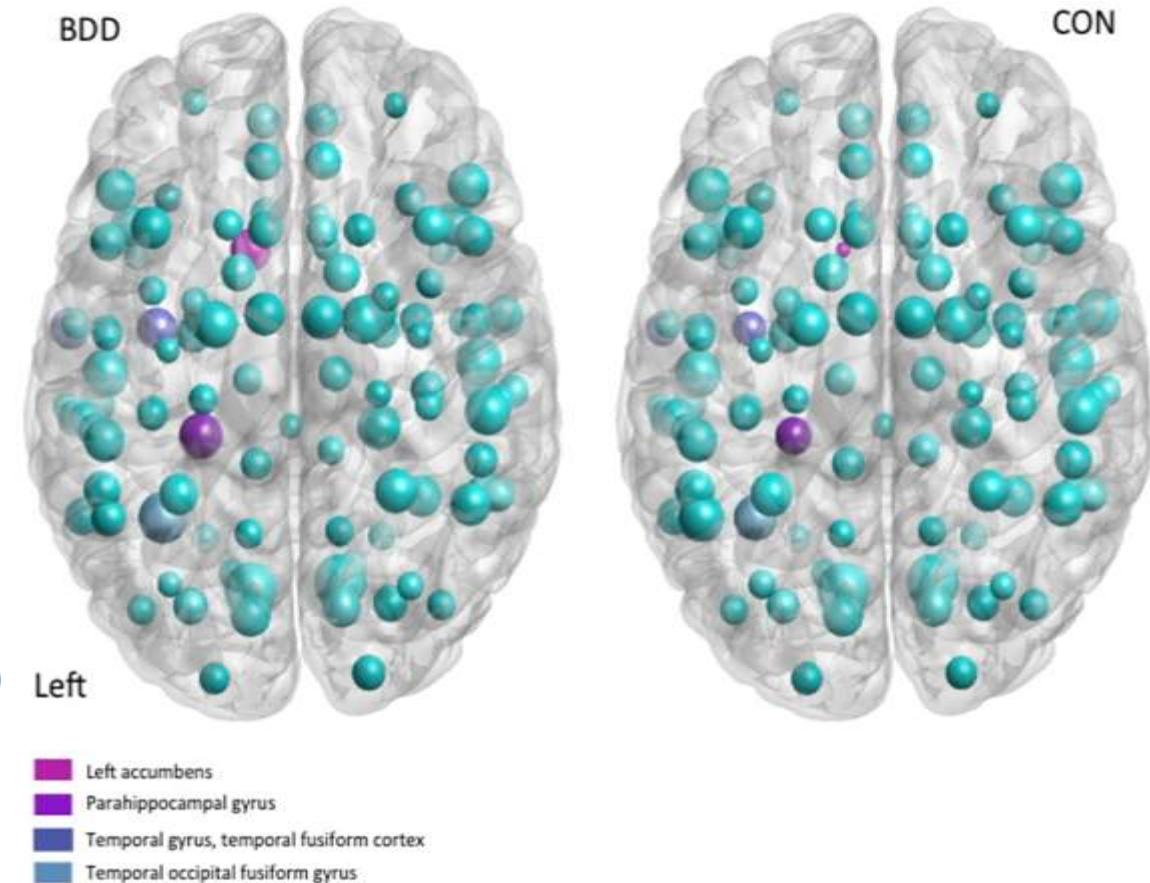


### BODY IMAGE IN OBESE PATIENT

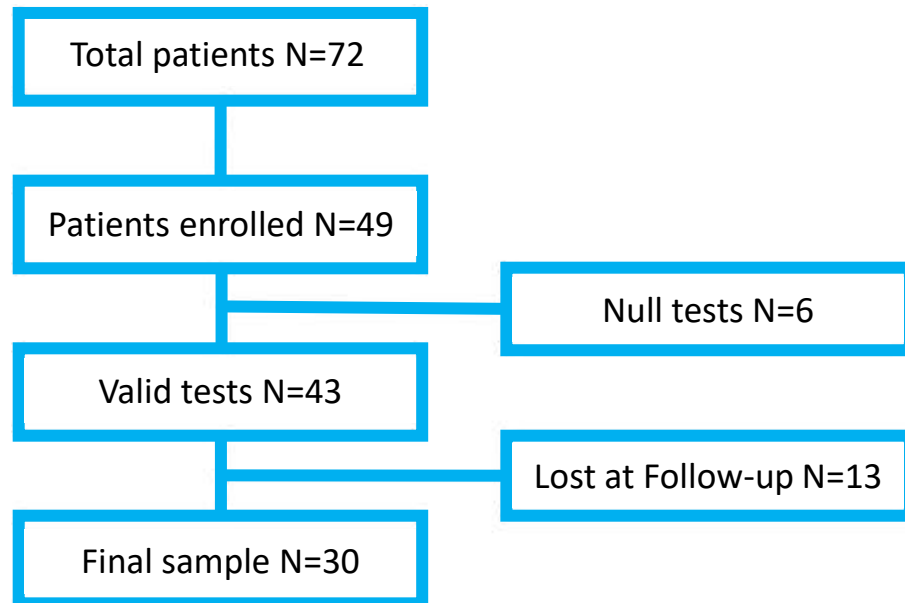
- Associated with low self-esteem and depression
- Higher risk of developing dysmorphic symptoms (regardless BMI)

### BODY IMAGE IN OBESE & DEPRESSED PATIENT

- Higher scores in body dysmorphism scale (regardless severity of depression)



- **Sample origin:** patients undergoing Laparoscopic Sleeve Gastrectomy from December '21 to April '22
- **Psychometric questionnaires:** self-administered **before** and **6 months after** surgery
- **Primary outcome:** prevalence and course of depression and body image concerns (before and after surgery)
- **Secondary outcome:** relationship between individual characteristics and psychometric scores



### PSYCHOMETRIC QUESTIONNAIRES

- **Beck Depression Inventory II (BDI-II)**
  - Presence and severity of depressive symptoms
  - Four class of severity: none, mild, moderate, severe
- **Body Uneasiness Test A (BUT-A)**
  - Probability of pathological body image concerns
  - Global Severity Index (GSI) cut-off: > 1,5

### SAMPLE DEMOGRAPHICS

- Sex: 25 F (83,3%) – 5 M (16,7%)
- Age (mean): 43,6 y ( $\pm 11,68$ )
- Weight (mean): 114,03 kg ( $\pm 18,13$ )
- BMI (mean): 43,07 kg/m<sup>2</sup> ( $\pm 4,61$ )

### COMORBIDITIES

- DMT2: 2 (6,7%)
- OSAS: 2 (6,7%)
- Anxiety: 5 (16,7%)
- Hypertension: 5 (16,7%)
- Chronic gastritis: 11 (36,7%)
- Steatosis: 22 (73,3%)

### PREVIOUS SURGERY

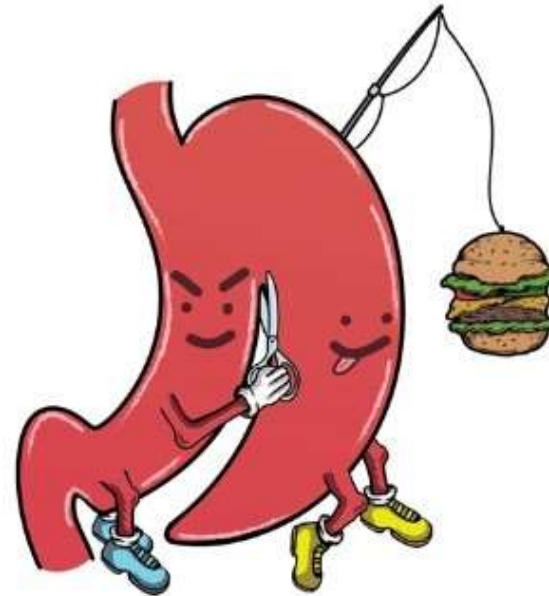
- LAGB: 5 (16,7%)
- Cholecystectomy: 6 (20,0%)
- Major gynecologic surgery: 11 (40,0%)



"Your skin is enlarged."

### POST-OPERATIVE COMPLICATION

- 1 proximal leak
  - Surgical toilet and drainage
  - Resolution in 40 days
- 1 “dumping-like syndrome”
  - Tailored diet therapy
  - Resolution in 2 months



### WEIGHT LOSS

- Weight (mean): 100,03 kg ( $\pm 13,97$ )
- BMI (mean): 37,85 kg/m<sup>2</sup> ( $\pm 3,83$ )

### COMORBIDITIES REMISSION

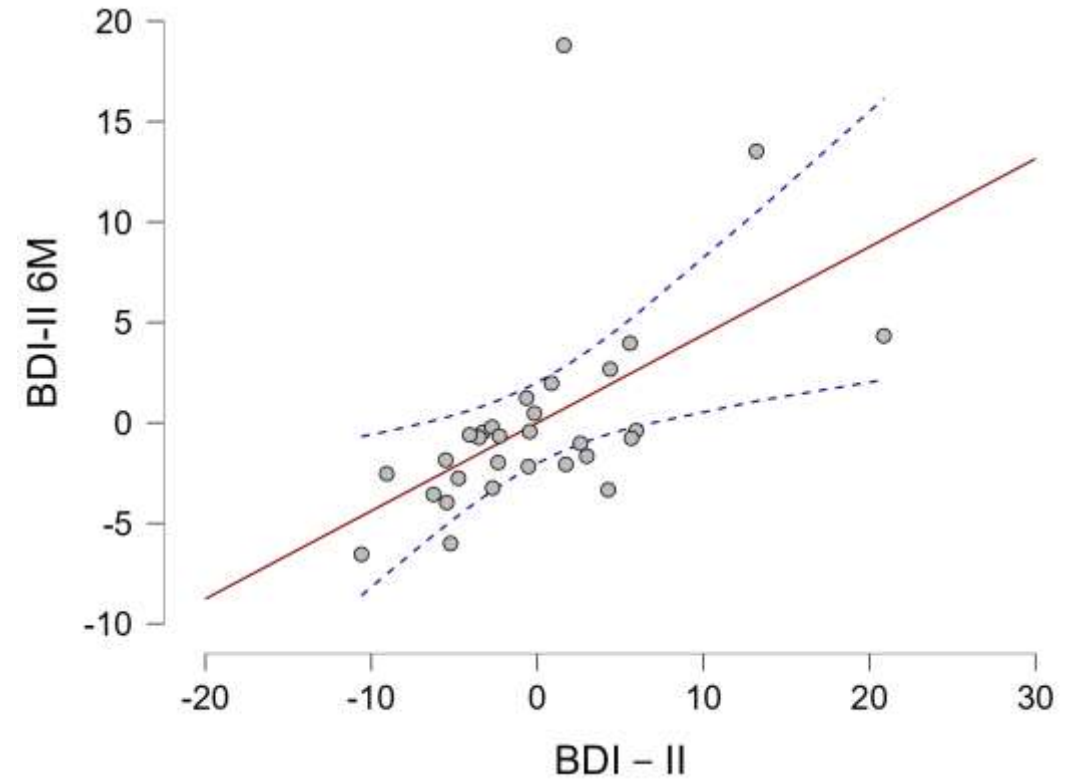
- OSAS: 1 (50,0%)
- Hypertension: 4 (80,0%)
- DMT2: 2 (100,0%)

### PREOPERATIVE SCORES

- BDI-II (mean): 9,5 ( $\pm 6,86$ )
- Mild symptoms: 8 (26,7%)
- Severe symptoms: 2 (6,7%)

### 6 MONTHS AFTER SURGERY SCORES

- BDI-II 6M (mean): 6,47 ( $\pm 6,02$ )
- Severe symptoms: 2 (6,7%)



**Higher preoperative scores LEAD to higher post-operative scores ( $p < 0,001$ )**

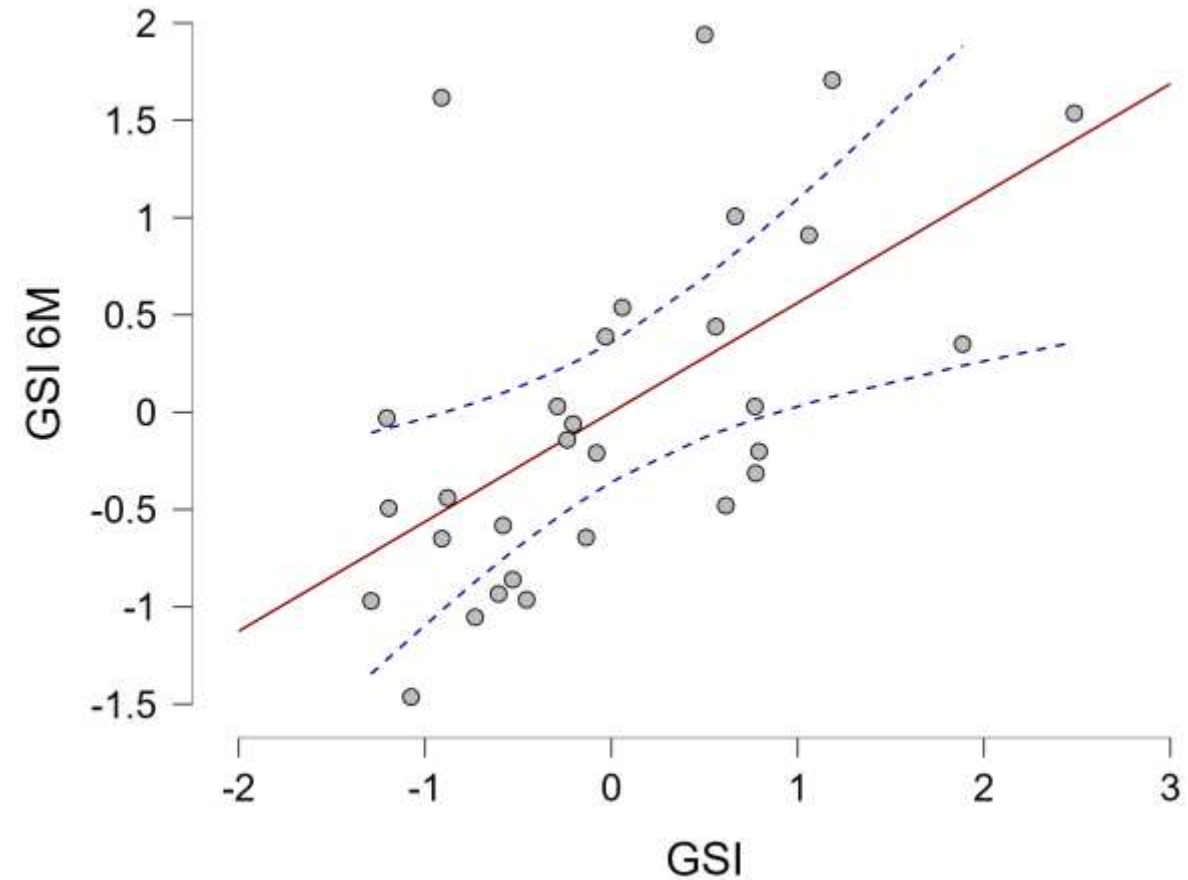


**PREOPERATIVE SCORES**

- GSI (mean): 2,27 ( $\pm 0,94$ )
- Pathological symptoms: 22 (73,3%)

**6 MONTHS AFTER SURGERY SCORES**

- GSI 6M (mean): 1,30 ( $\pm 1,07$ )
- Pathological symptoms: 9 (30,0%)



**Higher preoperative scores LEAD to higher post-operative scores ( $p$  0,021)**

### PREOPERATIVE SCORES AND COMORBIDITIES

#### Steatosis

- Worsening depressive symptoms
- BDI-II (mean) increase: **+5,3 points ( $p$  0,028)**



#### Anxiety

- Worsening depressive symptoms
- BDI-II (mean) increase: **+9,7 points ( $p$  0,005)**



### POST-OPERATIVE SCORES AND COMORBIDITIES

#### Chronic Gastritis

- Improving depressive symptoms
- BDI-II 6M (mean) decrease: **-3,5 points ( $p$  0,047)**

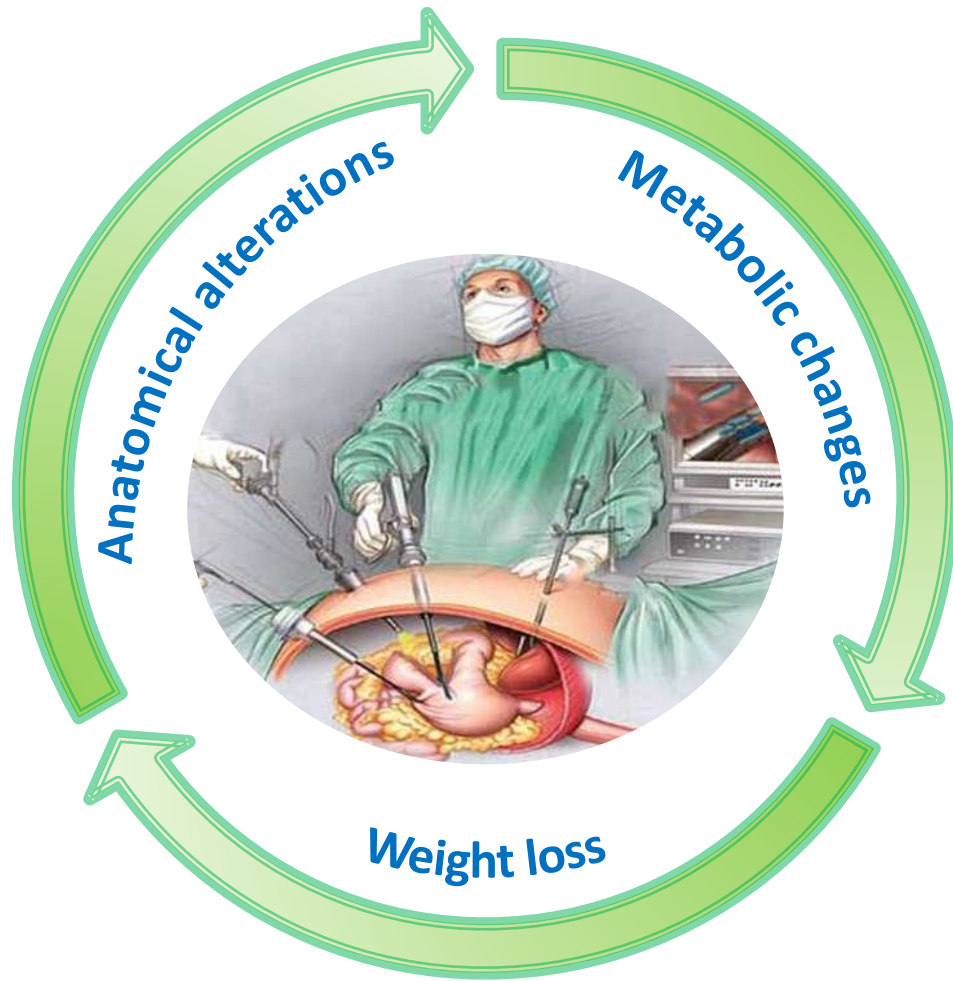


#### Previous Major Gynecologic Surgery

- Worsening body image concerns
- GSI 6M (mean) increase: **+1,1 points ( $p$  0,005)**



**No relation found between Depression and Body Image Concerns** (sample size??)



**RE-THINKING PATIENT SELECTION CRITERIA**

*Weight-centric*

*Disease-centric*



James et al. – *The Lancet* 2018; Buchwald H. – *Obes Surg* 2014; Rubino et al. – *Lancet Diabet Endocrinol* 2020; Sjöström L. – *Journal of Internal Medicine* 2013



**Thank you for**  **your attention**