

“Bariatric surgery in severe adolescent obesity : a retrospective study of 35 clinical observations”

Riquin E.¹, Malka J.¹, Schmitt F.², Beaumesnil M.², Robin M.³, Curt F.³, Corcos M.³, Coutant R.², Duverger Ph.¹

¹University Department of Child and Adolescent Psychiatry, Angers ; ²University Department of Pediatrics, Angers ;

³University Department of Child and Adolescent Psychiatry, Institut Mutualiste Montsouris, Paris.

The authors have no conflicts of interest

Introduction

- Obesity is a **growing phenomenon** in the world.
- In France, 18 % of children and adolescents are obese, and 70 % remain so in adulthood.
- Early treatments improve outcomes in short and long term preventing morbidities and reducing mortality.
- However, there is a low efficiency of the only medical treatment, so the **bariatric surgery is questioned for adolescents**

Bariatric surgery indications in adolescent

- Extrem obesity (BMI>40 or >35 with comorbidities), and resistant obesity
- Long term follow up before and after surgery is recommended

Materiel and Methods

- In the University Hospital of Angers :
- **“Obesity network” : Multidisciplinary follow-up of obese pediatric patients +/- bariatric surgery with laparoscopic gastric banding (LAGB).**
- Study : Retrospective, single-center and descriptive .
- n = 35 patients for whom bariatric surgery was considered.
- Inclusion : on 4 years.
- **Primary objective** : Studying so categorical and dimensional population and specific psychopathology of morbidly obese patients candidates for bariatric surgery.
- **Secondary objective** : Define a rational decision of surgical management.



Results

- **General characteristics**

	Total	Min ; Max	Boys	Girls	p
Number (%)	35		17 (51,4)	18 (48,6)	
Age (years)	15,3 +/-1,15	12,3 ; 17,7	14,9 +/-1,27	15,7 +/-0,89	<0,05
BMI (kg/m2)	39,9 +/-4,49	30,8 ; 48,6	39,0 +/-4,85	40,7 +/-4,08	ns

88,6 % of patients had at least one comorbidity :
endocrine, metabolic, respiratory or
musculoskeletal...

- **Psychiatric background: 54.3%** (depression, anxiety, conduct disorder, self-harm, suicidal ideation).
- **Mental suffering : 85.3%**
 - Body dissatisfaction : 67,6 %
 - Bullying : 58,8 %
 - Loneliness : 47,1 %
 - Depression : 45,5 %
 - Low self esteem : 39,4 %
 - Anxiety : 35,3 %
 - Suicidal ideation : 8,8 %

- **Eating disorder** : 68.6%. Among them, 65.7% of binge eating disorder.
- 41,1 % verbalized no affects related to food intake
 - Pleasure for 17,2%, fight against annoyance and consolation for 13,8 % each, and angry and compulsion in 6,9 % each)

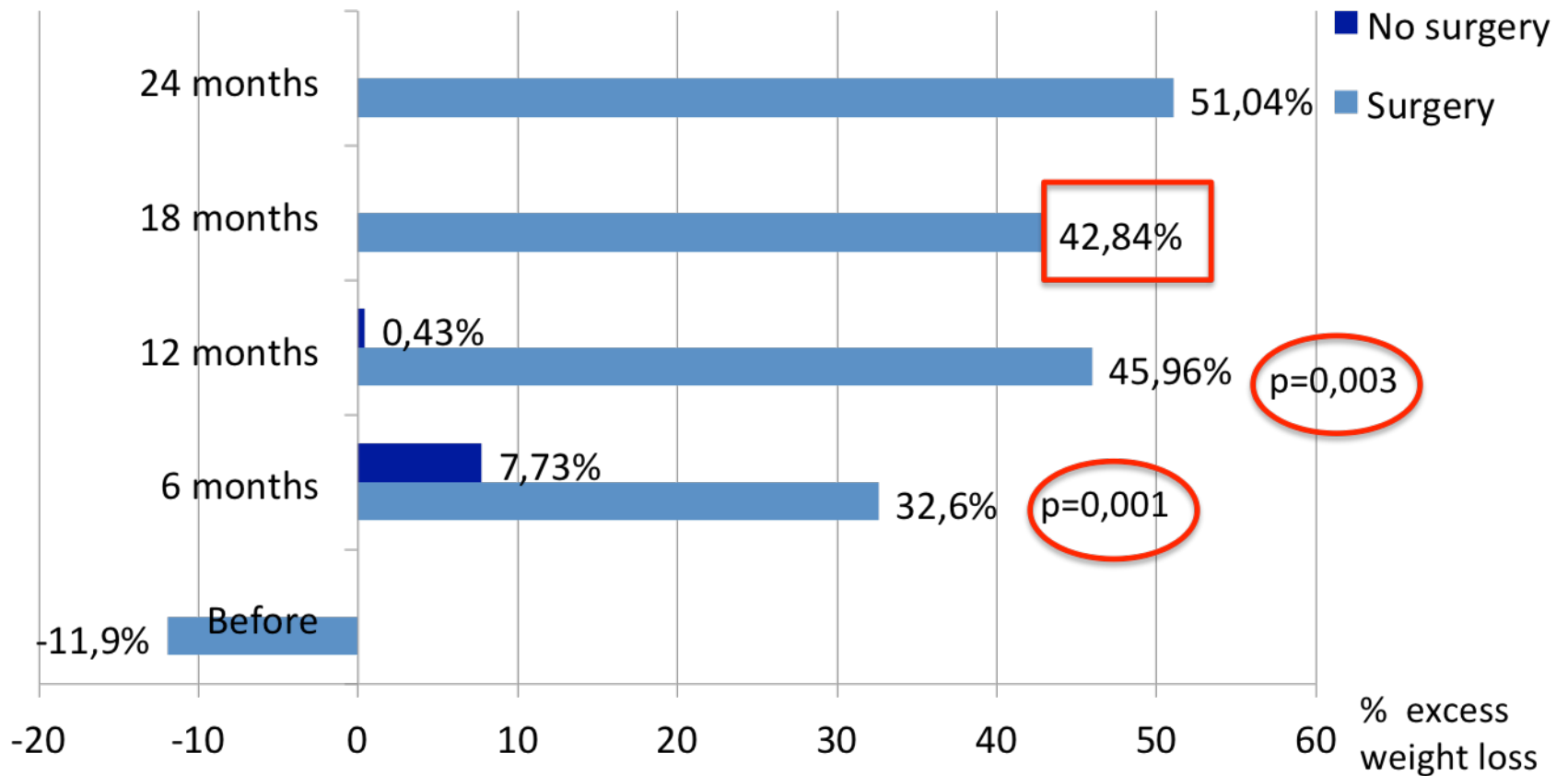
- **Social and family situation**
- 60,2 % had at least one obese or overweight parent, 23,1 % had 2 parents with obesity or overweight and 30,8 % had no parental background
- For 42,9 % of patients the father was missing (dead, unknown or without news from him)

- **Age of weight gain = 4,8 years**
 - Linked by young patients and family to a significant life event in 71,9 % of cases (divorce, parental death....)
- **Delay between weight gain and specialized consultation = 7,5 years**
 - Significantly linked with psychiatric background (5,89 years against 9,47 years ; $p=0,006$)

- **Surgery**

- 16 patients operated (45,7 %), 67 % of girls / 23 % boys ($p=0,01$)
- 16.49 months between entering the network and the surgery.
- 13,39 months between the first child psychiatry consultation and the surgery.
- Patients who had a good and very good compliance to the network, were more operated than others ($p<0.001$)

Percentage of excess weight loss



Changes in median scores of the health-related quality of life General PedsQL™, from the preoperative period (initial) to two years (M24) follow-up.

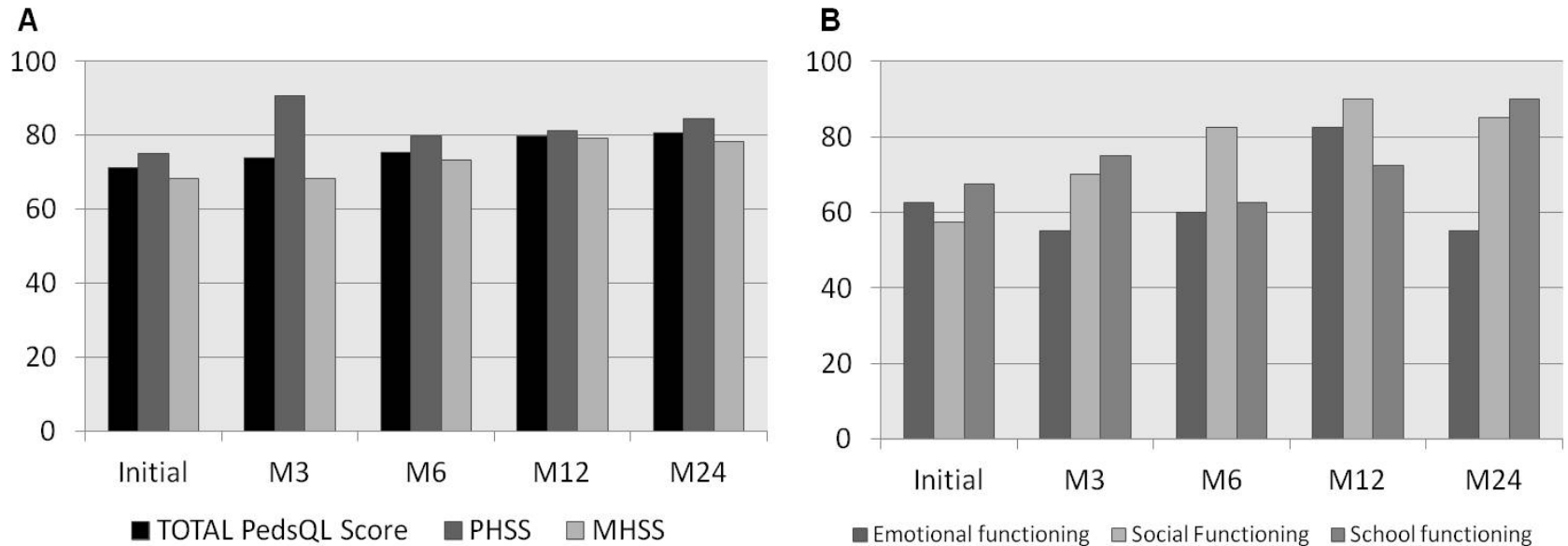


Fig. A: evolution of the total General PedsQL™ score and associated Physical Health Summary Score (PHSS) and Mental Health Summary Score (MHSS).

Fig. B: evolution of the three items composing the MHSS: emotional functioning, social functioning and school functioning.

Discussion

- Lot of psychiatric comorbidities and psychiatric background in young obese patients.
- Must draw our attention on the **vulnerability** of these patients.

- **Obesity : a loss issue ?**
- Failure of physic but also psychic loss
- Eating to protect against the loss ?
- Incorporation instead of introjection ?
- Importance of psychiatric follow up to take care and prevent the risk of expression of suffer in other way than BED (self harm...)

- **Is adolescence a good moment ?**
- Many psychiatric complications in adulthood (suicidal ideations, couple issues...)
- Surgery in adolescence ?

And if it particularly was the best moment ?

- Synaptogenesis and brain transformation, body transformation...

Conclusion

- For bariatric surgery, the psychotherapeutic approach must accompany the "doing", without sacrificing the "understanding."

To further studies...

Thank you for your attention

elise.riquin@chu-angers.fr