

Bariatric surgery: a tool for pregnancy

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ABSTRACT

In many cases, doctors looking after pregnant women are not fully informed about particularities of a pregnancy following bariatric surgery. They do not recommend nutritional supplements or organizing multidisciplinary team meeting. In addition many of this patients are not informed regarding possible complications and have high expectations in terms of outcomes.

Keywords: bariatric surgery, obesity, pregnancy, gastric sleeve

INTRODUCTION

Obesity is a pandemic issue worldwide, and the number of people suffering of this condition is ever-increasing, including young, fertile women. This condition affects different stages of a women's life. It carries multiple risks throughout pregnancy, from first trimester to postpartum. Therefore, it is of utmost importance for women envisaging pregnancy, to achieve a normal weight and a healthy lifestyle [1].

The influence of weight loss on the life span through diet, lifestyle modifications and medical treatment is possible although modest, with an average weight loss of 3 Kg. Moreover, there are no studies that span for a period more than 10 years. Therefore, for these methods to work is necessary lifelong compliance, which is difficult to achieve [2].

Bariatric surgery as tool for weight loss induction was made in the 50's, when small intestine reduction, lead to malabsorption and weight loss. In recent times, two methods have been used: restrictive, encompassing sleeve gastrectomy and gastric banding and malabsorptive roux-en-Y gastric bypass or biliopancreatic diversion [2,3]. The problem with the gastric banding is it requires frequent adjustments and soft food can't pass the banding. Malabsorptive techniques, shorten the small bowel,

reducing absorption. Multiple studies show that the most effective procedures are gastric sleeve and Roux en Y [4].

Currently, one recommendation is that a woman wait for two years following bariatric surgery to allow the body to adjust to nutritional changes [5]. Several studies have found little evidence for this advice. The influence of bariatric surgery on fertility and on the pregnancy evolution is equivocal, without any robust evidence that improves conception or reduces the rate of early miscarriage. Finally, macrosomia and pregnancy hypertension, do not seem to be reduced as much as it was expected following bariatric surgery [6,7].

Different guidelines recommend, bariatric surgery as the most cost effective way of losing weight for committed patient with BMI over 35 kg/m² and comorbidities or BMI over 40 kg/m². Around 30% of patient willing to undergo bariatric surgery, are driven by desire to become pregnant [8].

Bariatric surgery is expensive and is also related to education and socio-economic status. The level of education, knowledge, and doctors belonging to other specialities also play a role. Patients with sleep apnoea are more likely to demand bariatric surgery. Looking at the aforementioned facts, education is

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the primary tool in referring patients for bariatric surgery. In the same time, education involves providing information about, side effects and complications [9]. Mortality is between 0,1% and 0,4% depending on the severity of the procedure [10].

TABLE 1. Complication of bariatric surgery

- Anastomotic fistulas
- Haemorrhage
- bowel obstruction
- infection
- ulceration
- band movement

All these complications that appear following bariatric surgery, should be compared with foetal and maternal complications in high BMI women [4].

TABLE 2. Foetal and maternal risk

Spontaneous abortion
Gestational Diabetes
Wound infection
Thromboembolism
Hypertensive disorder
Emergency Caesarean Section
Macrosomia
Shoulder dystocia
Stillbirth

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In some of these complications, benefits of bariatric surgery are proven, such as in thromboembolism. In other conditions positive effect remain to be proven.

Following bariatric surgery, 80% of women, would like to have cosmetic surgery. In fact, only 12% of this woman, undergo plastic surgery [11].

Prolactin production because of sucking is reduced as well in patient with morbid obesity while in patients with malabsorptive procedures energy content could be affected, therefore nutritional supplement prenatally and postnatally is desirable [12].

With the advance of social media, patients are being influenced in their decision, by different chats group, many of them are highly critical of different procedures, groups and surgeons. This phenomenon has not yet been a subject of research [13,14].

CONCLUSIONS

An increasing number of women are undergoing bariatric surgery. Looking after this type of patients is a challenge for many healthcare professionals. The fact that data regarding this patient's outcome and management are scarce makes the case even more complicated. This patient should be treated as high risk and multidisciplinary risk should be provided during pregnancy and puerperium.

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