



DECISION-MAKING GUIDE

Obesity and surgery

*Centre intégré
de santé
et de services sociaux
de la Côte-Nord*

Québec 



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INTRODUCTION

This brochure aims to help the person suffering from obesity make an informed decision regarding a possible surgery.

The first part lists the advantages and disadvantages related to each type of surgery, while the second part explains the steps to take to have surgery at the Hôpital Le Royer.

What is morbid obesity

Morbid obesity is a severe form of obesity that has consequences on the health and quality of life of the affected people. Obesity is measured using the body mass index (BMI).

The BMI is determined by dividing a person's weight by their height.

Example:

Weight of 264 lb converted into kilograms: $264 / 2.2 = 120$ kg

Height of 5 ft. 7 in. converted into metres: $67 \text{ in.} \times 2.54 = 170 \text{ cm} / 100 = 1.70$ m

$$\text{BMI} = \frac{120 \text{ kg}}{1.70 \text{ m} \times 1.70 \text{ m}} = 41 \text{ kg/m}^2$$

We are in the presence of morbid obesity when a person's BMI is 40 kg/m^2 or greater, or 35 kg/m^2 or greater with at least one obesity-related disease.

Why use surgery when someone is suffering from morbid obesity?

Almost all diets are effective to start losing weight. However, in situations of morbid obesity, they are almost all ineffective to maintain the weight loss.

Medical progress in the past 40 years allowed us to refine the surgical approach. The World Health Organization (WHO) recognizes this approach as the only available and effective treatment for users with a BMI greater than 40 kg/m^2 .



Are there different types of surgery?

There are different types of surgery that are based on the following principles:

- **Restriction**, which reduces the amount of food the stomach can hold;
- **Malabsorption**, which reduces the amount of food digested and absorbed in the intestine;
- The **combination of both restriction and malabsorption**. This is the case for the gastric bypass and the biliopancreatic diversion with partial gastrectomy (BPD/DS).

The different types of bariatric surgery are explained in the next part. However, the only surgery available at the Hôpital Le Royer is the **sleeve gastrectomy**. The other types are presented for information purposes only.

Should a type of surgery other than the sleeve gastrectomy better suit you, you will be met and referred to the Institut universitaire de cardiologie et de pneumologie de Québec (IUCPQ).

1. PART 1: TYPE OF SURGERY

No surgery is perfect. Each type of surgery has its advantages and disadvantages.

1.1 Sleeve gastrectomy (surgery available at the Hôpital Le Royer)

Definition

- 75% reduction of the stomach volume.

Weight loss

- 15% to 25% of your initial weight within two to five years;
- Weight regain is variable, but more frequent after two years.

Risks

- Death related to the surgery in less than 0.3% of cases;
- Complications in 3% to 15% of cases, mostly feeding difficulties.

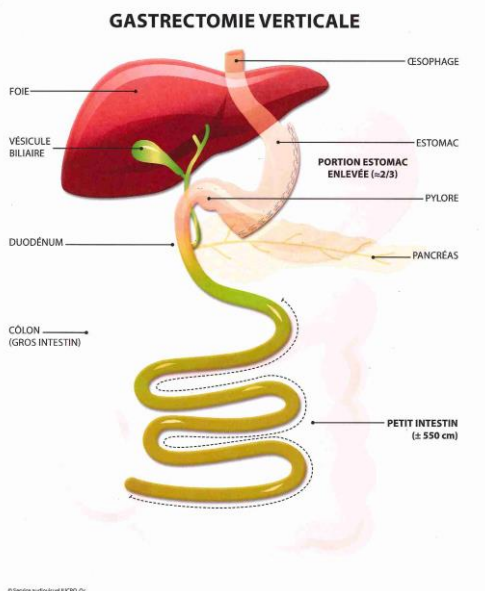
Advantages

- Simple procedure with a low surgical risk;
- Improves obesity-related health problems (such as diabetes, sleep apnea, hypertension and hyperlipidemia), provided that you lose weight and maintain that loss.

Disadvantages

- Important reduction in the amount of food you can eat;
- Presence of reflux or frequent nausea;
- Presence of occasional vomiting;
- Weight regain in certain surgical patients, who require a second intervention, often the biliopancreatic diversion (BPD).

Recovery and improvement of health problems cannot be ensured in the long term if you regain weight.



1.2 Biliopancreatic diversion with partial gastrectomy (BPD)

Definition

- 75% reduction of the stomach volume;
- Bypass of the intestine, which causes the partial absorption of food.

Weight loss

- 35% to 50% of your initial weight within one to two years;
- Weight loss maintained after ten (10) years.

Risks

- Death related to the surgery in less than 0.5% of cases;
- Long-term complications in 15% of cases, mostly vitamin, protein and mineral deficiencies.

Advantages

- Cures or improves:
 - Type 2 diabetes at 92%, depending on how long you have been taking insulin;
 - Hypertension at 50%;
 - Sleep apnea at 86%;
 - Dyslipidemia (high cholesterol) at 95%;
- Reduces the risk of suffering from a cardiovascular disease;
- Allows you to eat meals of an almost normal volume.

Disadvantages

- In average, 10% of surgeries fail;
- Disruption of the intestinal flora with presence of bloating and foul-smelling gas in one in three surgery patients;
- Between two and six stools per day, and sometimes diarrhea;
- Higher risk of vitamin, protein and mineral deficiencies;
- You will have to take five different supplements for life (calcium, iron, multivitamins, vitamins A and D);
- Requires a rigorous life-long follow-up with the bariatric surgery team.

Recovery and improvement of health problems cannot be ensured in the long term if you regain weight.

1.3 Roux-en-Y gastric bypass

Definition

- Reduction of the stomach to hold 30 millilitres (two tablespoons) of food at a time;
- Bypass of the intestine, which causes the partial absorption of food.

Weight loss

- 25% to 35% of your initial weight within one to two years;
- Weight loss maintained after five years.

Risks

- Death related to the surgery in less than 0.5% of cases;
- Long-term complications in 15% of cases, mostly vitamin and mineral deficiencies, and feeding difficulties.

Advantages

- Cures or improves:
 - Type 2 diabetes from 65% to 80%, depending on how long you have been taking insulin;
 - Hypertension at 50%;
 - Sleep apnea at 84%;
- Reduces the risk of suffering from a cardiovascular disease;
- This surgery is favoured for patients with gastroesophageal reflux.

Disadvantages

- In average, 15% of surgeries fail;
- Important reduction in the amount of food you can eat;
- Stomach discomfort after eating certain foods;
- Risk of vitamin and mineral deficiency;
- You will have to take four vitamin and mineral supplements for life;
- Lifelong follow-up.

Recovery and improvement of health problems cannot be ensured in the long term if you regain weight.

1.4 Gastric banding

Definition

- Reduction of the stomach to hold 10 to 15 millilitres (1 tablespoon) of food at a time.

Note: This surgery is no longer practised, but interested users can be met to discuss it.

2. PART 2: HOW THE PROGRAM WORKS AT THE HÔPITAL LE ROYER

The involvement of the user is essential for the overall success of the surgery, as it helps:

- Reduce the risk of regaining weight;
- Limit the risks of dietary deficiency;
- Limit the risk of developing side effects.

In order to be eligible for the surgery performed at the Hôpital Le Royer, the person must:

- 1) Have a BMI of 35 kg/m² or greater with at least one obesity-related disease (such as diabetes, hypertension, sleep apnea, arthrosis, etc.), **OR** 40 kg/m² or greater with or without an obesity-related disease.
- 2) Have already applied weight-loss strategies.
- 3) Be ready to commit to a life-long follow-up with the surgery team of the Hôpital Le Royer, in addition to the regular follow-up with their family physician.
- 4) Be ready to make changes to their lifestyle habits:
 - Include protein-rich foods in their daily diet;
 - Reduce their consumption of foods that are high in fat and sugar;
 - Avoid overeating;
 - Take supplements for life, following the recommendations of the team;
 - Avoid drinking soft drinks;
 - Stop smoking.
- 5) Not have any alcohol or drug addiction.
- 6) Be able to take a three-month-long sick leave following the surgery.

**THE USER'S LIFELONG COMMITMENT IS ESSENTIAL
THAT IS SOMETHING TO THINK ABOUT...**

HERE ARE THE STEPS TO COMPLETE AS PART OF THE PROGRAM:

1. Referral to the bariatric clinic

Your referral for a consultation at the bariatric clinic is **exclusively** accepted by fax at **418 295-3604**.

You must be referred by your family physician in order for your request to be accepted by the bariatric clinic.

2. Questionnaire to complete to allow for the study of your file

A decision-making guide, a food diary, a commitment form and a questionnaire are mailed to you to help us study your file. In order for you to be eligible, you must return the commitment form and the questionnaire within six weeks of the mailing date. We will send you an acknowledgement of receipt by email or regular mail in the following six to eight weeks. The commitment form is used to validate your understanding of the requested clinical process.

3. Classification of your file

A multidisciplinary team composed of a surgeon, a nurse, a nutritionist, a kinesiologist and a social worker studies each file in order to establish your priority level on the waiting list. Together, they will classify your file to determine the clinical pathway.

4. Opening a file at the bariatric clinic

In the following months, a nurse will call every registered user for a first telephone appointment. They will also give instructions to the user or ask them to complete certain evaluations to further document the request. A nutritionist will also make a first intervention to evaluate and guide the user through the clinical process.

5. Preparation for the surgical meeting

This step consists in meeting the surgeon and other members of the team, depending on the user's health problems. These consultations will allow us to have all the information required to decide whether to operate or not.

The meeting with health professionals is scheduled to take place over two or three days. After this meeting, you may sometimes need to come back for examinations or to meet one or more physicians.

6. Clinical pathway and therapeutic assistance

The purpose of this step is to ensure that the user is well prepared once the surgery is authorized. It can be spread over several weeks, depending on the recommendations of the professional team. There may be meetings with professionals, telephone follow-ups, information sessions, etc.

7. Preoperative meetings

Three to four weeks before the surgery, the user meets the nurse, who will give them the last instructions to complete their preparation, collect the required samples and make them sign various documents. The nutritionist and the surgeon may also summon the user.

The user will be admitted on the day of the surgery.



THE USER IS RESPONSIBLE FOR THEIR ACCOMMODATION DURING THE EVALUATION AND THE PREPARATION FOR THE SURGERY

8. Surgery and hospitalization

The hospital stay lasts two to four days in average, depending on the postoperative progress.

9. Postoperative follow-up

Once you leave the hospital, you must:

- Follow a soft diet for the first three weeks;
- Have your medication adjusted by your family physician;
- Ensure you do a blood test within the required timeframe in order to meet your surgeon for your postoperative follow-up.

The nurse of the bariatric clinic will give you the date and time of your next appointment with your surgeon.

For life, you will have to:

- Take supplements (minerals and vitamins);
- Get blood samples on a regular basis;
- Follow the instructions of the medical team regarding the adjustment of the prescribed supplements;
- Attend medical follow-up appointments;
- Maintain your new lifestyle habits.



3. REFERENCES

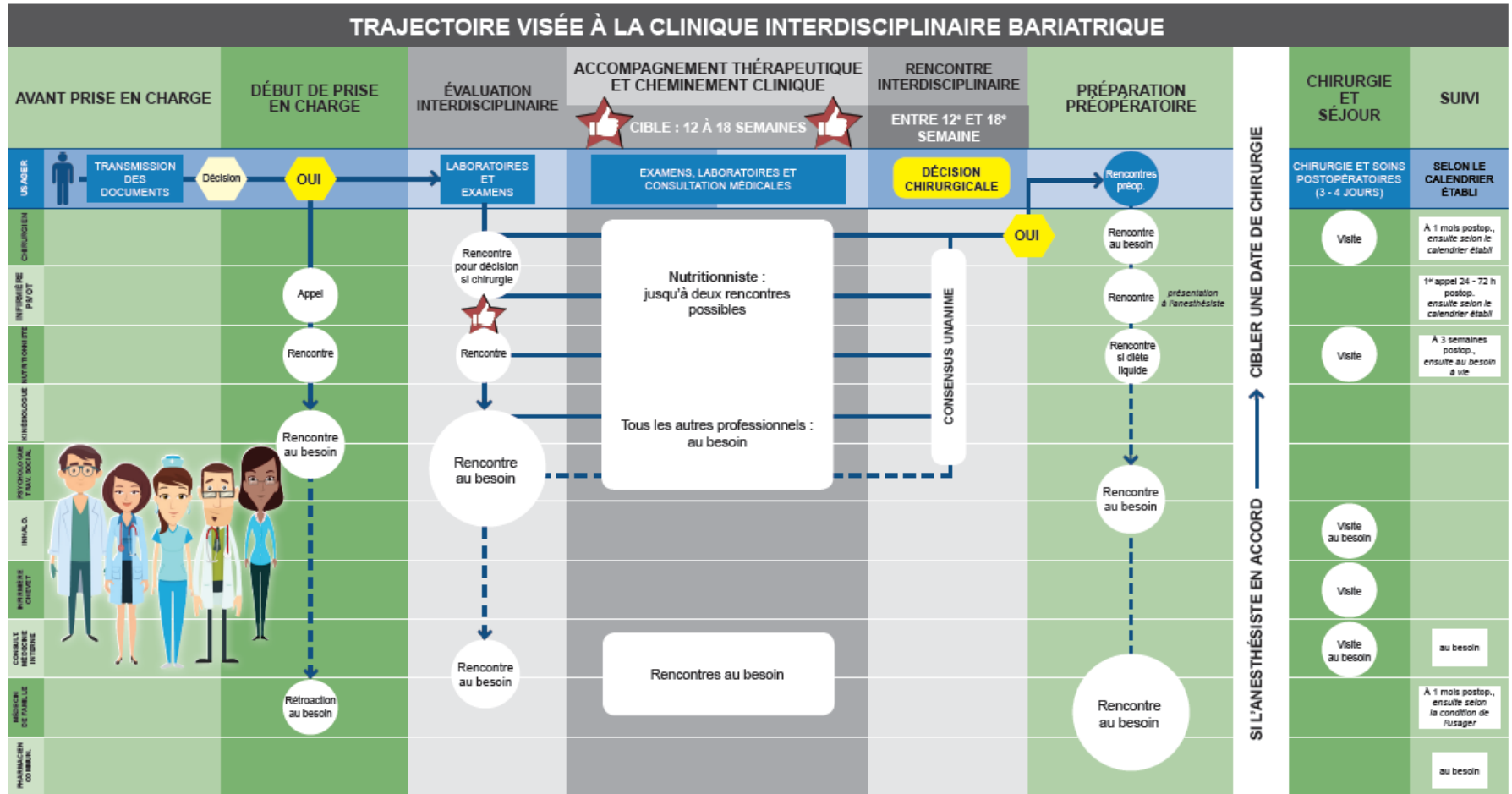
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4. BARIATRIC SURGERY CLINICAL PATHWAY



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