Weight Control and Metabolic Surgery Program

Program Overview

The Weight Control and Metabolic Surgery Program of The University of Hong Kong understands that, for many people, the decision to have bariatric surgery can be difficult. This program provides essential information for people who are considering surgery as a method to control their body weight as well as their metabolic syndrome.

All patients considering weight control (bariatric) surgery with the Weight Control and Metabolic Surgery Program at The University of Hong Kong must meet certain criteria before they can be considered for surgery. These criteria are based on guidelines from Asia Pacific Metabolic and Bariatric Surgery Society (APMBSS).

Eligibility for Surgery:

*Asians:*

1. BMI above 32kg/m² with co-morbidities (such as hypertension, Type II diabetes, hyperlipidaemia, obstructive sleep apnea etc.)
2. BMI above 35kg/m² with or without co-morbidities

*Caucasians (National Institute of Health (NIH) guidelines):*

3. BMI above 35kg/m² with co-morbidities (such as hypertension, Type II diabetes, hyperlipidaemia, obstructive sleep apnea etc.)
4. BMI above 40kg/m² with or without co-morbidities
5. A documented history of weight management and weight loss attempts with supervised diets and exercise programs
6. Absence of contraindications for surgery listed below

*Patients not suitable for bariatric surgery are:*

a. Uncontrolled medical diseases such as pituitary tumor induced endocrine disorder, thyroid dysfunction, chronic medical illness not under control etc.

b. Unrealistic expectation about the surgical outcome, e.g. expecting himself/herself to become a charming superstar model without modifying ones living style
c. High anesthetic risk

d. Patients without or very weak social support for joining the program or receiving bariatric surgery

e. Psychiatric illness including uncontrolled depression and need long term medication control.

f. Active alcoholism or active drug addiction

Process of the Program (Multidisciplinary Approach)

Step 1. Meeting a surgeon to:

   a. Determine whether patient meet the specific criteria required for surgery

   b. Allocate patients to either:

      1. a 3-6 months course of behavioral therapy (diet advise + exercise education +/- psychotherapy with referral to dietitian, physiotherapist and clinical psychologist),

      2. medication therapy (with referral to physicians for medications, e.g. Reductil, prescription and regular monitoring), or

      3. pre-operative screening (proceed to step 2)

Step 2. Arrange for screenings (multidisciplinary bariatric team):

   a. Pre-operative psychology screening

   Patients are assessed for psychiatric history, psychological function, weight and dieting history, eating behaviors. During the evaluation, patients are also educated on the behavioral changes necessary to ensure good post-operative results, as well as any psychological changes that can be anticipated after surgery.

   b. Pre-operative medical and surgical screening

   This screening determines whether patients are healthy enough for weight loss surgery. The tests include: a series of blood tests for vital organ function and hormonal screening to detect endocrine disorders, Chest X-ray, Electrocardiogram (ECG), Abdominal ultrasound, Upper endoscopy etc. Patients with heart disease or lung disease may not be appropriate surgical candidates.

   c. Nutritional evaluation

   This helps to evaluate patient’s eating behaviors, food selection practices, weight loss history and eating behavior. It helps patients adjust to their post-operative diet and achieve the best results possible from surgery.
Patients may have to keep a food diary to document their daily intake. Patients may also have to learn the principles of post-operative diet adjustment including protein and fluid requirements and, if indicated, vitamin and mineral supplement.

Following the screenings, the team meets to decide whether a patient is an appropriate candidate for surgery. This decision is based upon the patient’s physical and emotional state as well as eating habits, food preferences, activity levels and other health problems.

In some situations, the type of surgery desired by the patient may not offer optimal outcomes. For these individuals, a different type of bariatric surgery or an alternative treatment may be recommended.

Periodically, a patient will be required to meet certain additional criteria --- such as losing weight, attending counseling or undergoing physical therapy --- before surgery is scheduled. This course of action helps to provide patient the best possible chance of recovering from the surgery and succeeding at weight loss.

**Step 3. Surgery preparation**

One to two weeks before surgery, patient will have to admit to hospital for pre-operative work up including blood tests, chest x-ray and ECG. Anesthetist will have final assessment before surgery. He/she will be then discharged and readmitted one to two days before the surgery date.

**Step 4. Interventional therapeutic options**

1. Intragastric balloon

   ![Image of intragastric balloon]

   This is a non-surgical weight loss treatment. A balloon is placed inside the stomach by endoscope and acts as a bezoar partially filling the stomach to induce early satiety. It helps patients to adapt to a new healthy eating habit and comply with hypocaloric diet prescribed physicians and dietitians.

   **Advantages:**
   a. No side effects from medications
   b. Endoscopic approach of treatment
   c. Totally reversible

   **Disadvantages:**
   a. May cause abdominal discomfort, nausea, and vomiting.
b. May cause injury to the upper gastrointestinal tract or induce gastroesophageal acid reflux

c. Regular monitoring by physicians is required

d. Not recommended for cosmetic purpose

e. The balloon has to be removed within 6 months

Contraindications:

a. Patients who have active peptic ulcer

b. Patients with known increased risk of gastrointestinal bleeding

c. Patients who had previous stomach surgery

d. Patients cannot comply to physicians and dietitian’s instructions and cannot attend follow up clinic

e. Pregnancy

2. Laparoscopic gastric banding

![Image of laparoscopic gastric banding]

A small inflatable belt wraps around the upper part of the stomach. It restricts the amount of food consumed and gives a “full” sensation. This method has been shown to be effective in treating diabetes in some patients.

Advantages:

a. Minimally invasive surgical approach

b. Procedure is safe

c. Recovery is fast (2 days)

d. The band is adjustable

e. Significant long-term weight loss

f. Potentially reversible

g. May control diabetes

Disadvantages:

a. Weight loss may be slow

b. Infection, slippage and malfunction of band
c. Regular monitoring by physician is required particularly for band adjustment
d. Compliance with physician and dietitian advise is required
e. Not recommended for cosmetic purpose

3. Laparoscopic sleeve gastrectomy

A portion (the greater curve) of the stomach is resected by minimally invasive approach. It induces weight loss by restricting the amount of food intake. This operation reduced most Ghrelin (an appetite hormone) production. The desire for food is reduced thus generating the effect of weight loss. It is also effective in treating diabetes in most patients.

Advantages:
- Minimally invasive surgical approach
- Procedure is safe
- Recovery is fast (3-4 days)
- Significant, fast and long-term weight loss
- No retained foreign body inside body
- Can treat diabetes

Disadvantages:
- There is a small chance (0.5%) of developing bleeding and leakage.
- Anatomical alteration is irreversible
- Compliance to physician and dietitian advice is required
- Not recommended for cosmetic purpose
Step 5. Recovery

Recovery times for patients depend on the procedure. Patients who received laparoscopic gastric banding will stay in hospital for two to four days and will be able to returned to work two weeks. Patients who received sleeve gastrectomy may have to stay in hospital for 4 days to a week and returned to work 4-6 weeks.

In the early period after operation, patients have to follow a fluid diet. They are encouraged to do gentle walking and breathing exercise.

Step 6. Follow-up

Patients have to attend the Weight Control and Metabolic Surgery Clinic 1-2 weeks after discharge from hospital. Our multidisciplinary colleague will also monitor the progress and condition of the patients.

Team

Our dedicated multidisciplinary team comprises surgeons, registered nurses, clinical psychologists, nutritionists and physiotherapists.

Contact us / make appointment

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