

Advise on health risks of obesity and treatment options

Session 7

Acknowledgements
Obesity Canada

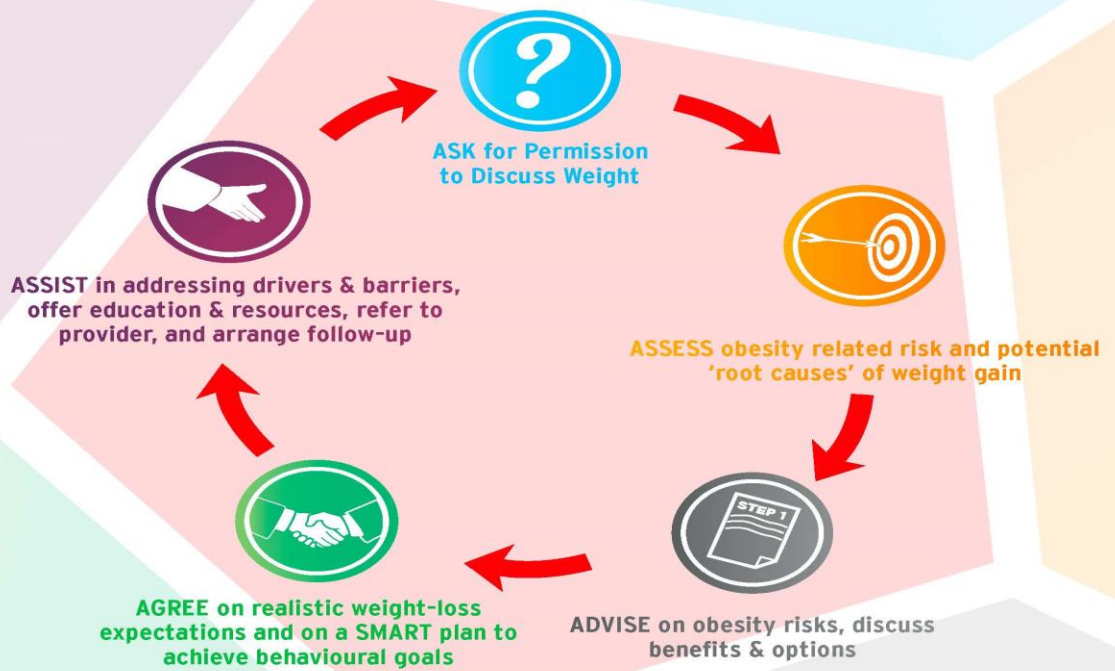




5As of Obesity Management

- **Ask** for permission to discuss weight.
- **Assess** obesity-related risk and potential “root causes” of weight gain.
- **Advise** on obesity risks, discuss benefits and options.
- **Agree** on realistic weight management expectations and on a SMART plan to achieve behavioural goals.
- **Assist** in addressing drivers and barriers, offer education and resources, refer to provider, and arrange follow-up.

Source: Obesity
Canada, 5As of
Obesity
Management



Severe obesity-related comorbidities

Type 2 diabetes

Pseudotumor cerebri

Hypertension

Gastroesophageal reflux disease (GERD)

Hyperlipidaemia

Venous stasis disease

Obstructive sleep apnoea (OSA)

Severe urinary incontinence

Obesity hyperventilation syndrome (OHS)

Debilitating arthritis

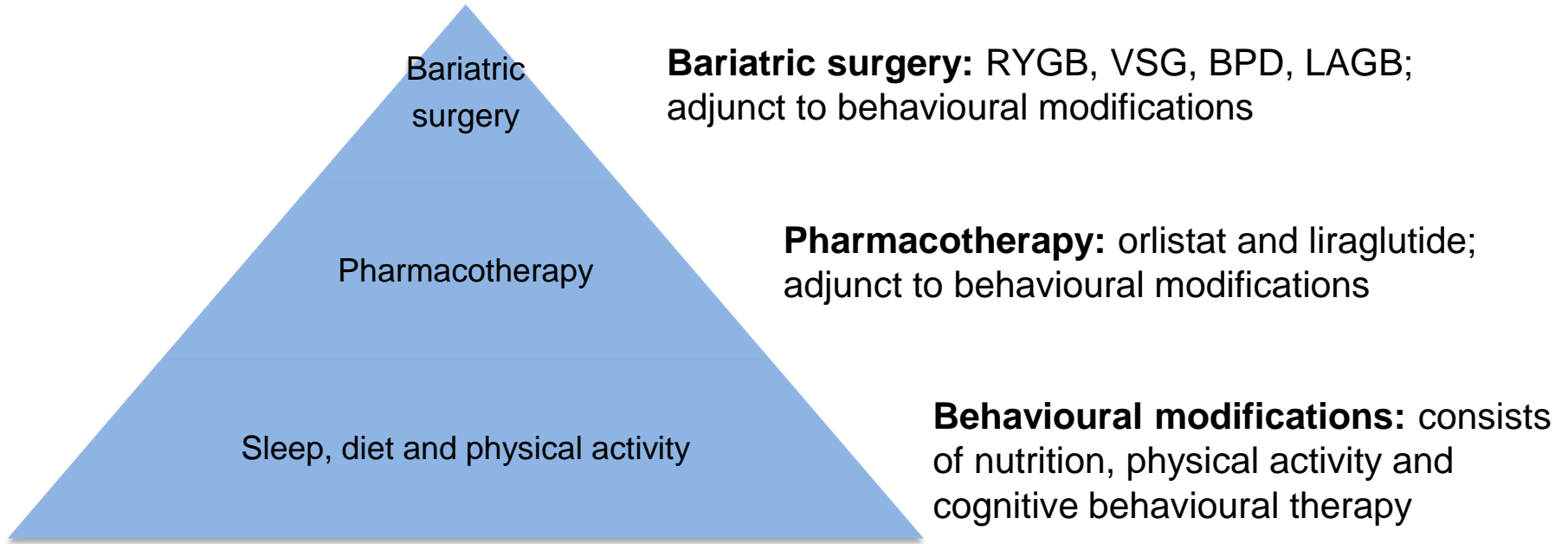
Pickwickian syndrome (combination of OSA and OHS)

Considerably impaired quality of life

Non-alcoholic fatty liver disease (NAFLD)

Non-alcoholic steatohepatitis (NASH)

Treatment modalities for obesity in adults

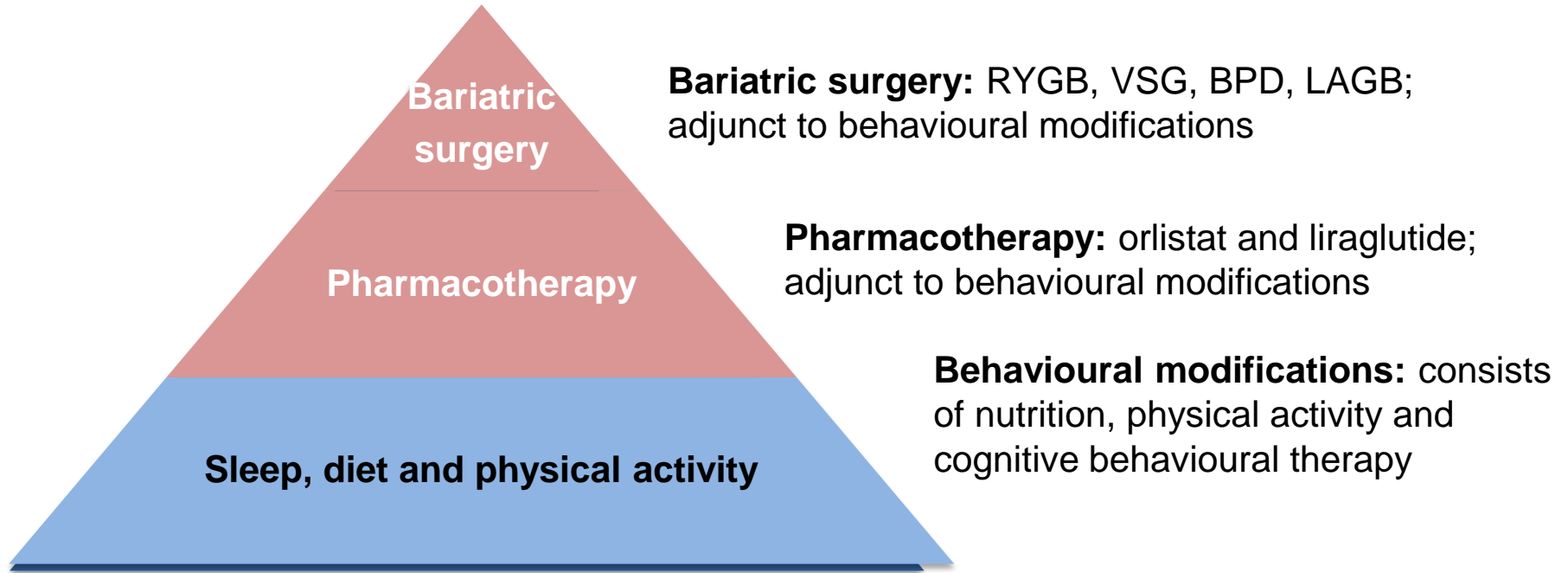


Choice of treatment depends on evaluation of a patient's level of obesity and their risk of obesity-associated disease.

Explain need for long-term strategy

- Relapse is virtually inevitable when any intervention stops.
- This means that all management strategies must be feasible and sustainable.
- The focus should be on stabilizing the situation and improving behaviours.
- Interventions involving “quick fixes” and unsustainable strategies will result in an inability to maintain health behaviours.

Treatment modalities for obesity in adults



Choice of treatment depends on evaluation of a patient's level of obesity and their risk of obesity-associated disease.

Pharmacotherapy

- Typically suitable for patients with a BMI ≥ 30 kg/m²; or for patients with a BMI ≥ 27 kg/m² who have concomitant obesity-related diseases and for whom dietary and physical activity has not been successful.
- Use of anti-obesity drugs has the potential to amplify adherence to behaviour change, specifically adhering to dietary interventions.
- Patients should also be actively engaged in a lifestyle programme that provides strategies and skills needed to effectively use the drug.
- Until recently, there were poor safety profiles of older medications (now withdrawn from the market).
- Pharmacotherapy is used in about 20% of cases.
- New obesity pharmacotherapies are now available and being developed.

Two classes of medications

- Appetite suppressant (altering monoamine neurotransmission)
- Reduced absorption of selective macronutrients from the GI tract

Herbal medications – a word of caution

- Use of alternative medications has increased dramatically over the last few decades.
- Supplement categories:
 - stimulants believed to increase fat metabolism;
 - supplements that claim to result in more muscle and not fat;
 - foods that attempt to influence food intake and satiety;
 - foods that attempt to induce gastric satiety by physical filling of the stomach.
- Herbal medications for weight management are not effective and use of these agents is discouraged.

Bariatric surgery

- The benefits of bariatric surgery are significant for patients with severe obesity. It is currently the best-established and most successful method for durable weight loss in such patients.
- Bariatric surgery has significant impact on many of the complications associated with obesity.
 - 80% of patients experience an early complete remission of type 2 diabetes mellitus; 75% experience a persistent remission more than two years after surgery. Mechanisms are unclear.
 - Patients experience improvement of dyslipidaemia, hypertension, and a decrease in coronary artery disease risk.
 - There are positive effects on OSA, GERD, NAFLD, and quality of life.

Bariatric surgery

- Bariatric surgery is a treatment option for people with obesity if all of the following criteria are fulfilled:
 - they have a BMI of 40 kg/m² or more, or between 35 kg/m² and 40 kg/m² and other significant diseases (for example, type 2 diabetes or high blood pressure) that could be improved if they lost weight;
 - all appropriate non-surgical measures have been tried, but the person has not achieved or maintained adequate, clinically beneficial weight loss;
 - the person has been receiving or will receive intensive management in a tier 3 service;
 - the person is generally fit for anaesthesia and surgery;
 - the person commits to the need for long-term follow-up.
- Choice of procedure should be customized based on the patient, goals and surgical expertise in the area.

NICE guidelines for bariatric surgery
(<https://www.plymouthhospitals.nhs.uk/nice-guidelines-for-bariatric-surgery>).

Bariatric surgery

NICE guidelines

- Patients with a BMI of 30–34.9 with diabetes or metabolic syndrome can also be considered for surgery (improvements in glycaemic control with type 2 diabetes and improved biochemical markers of CVD risk).
- This recommendation is based on limited evidence.

Considerations prior to recommending bariatric surgery

BMI of 40 kg/m² or more, or between 35 kg/m² and 40 kg/m² and other significant diseases.

Acceptable operative risk.

Unable to achieve and maintain healthier body weight with non-surgical approaches.

Psychologically stable with realistic expectations.

A well-informed and motivated patient who is willing to make a long-term commitment to follow-up, diet and physical activity recommendations.

A patient who has a strong social support system.

No significant mental health problems that would preclude postoperative compliance or may worsen after surgery.

Contraindications to bariatric surgery

Absence of a period of identifiable medical obesity management.

Patient who is unable to participate in prolonged medical follow-up.

Non-stabilized psychotic disorders, severe depression, personality and eating disorders, unless specifically advised by a psychiatrist experienced in obesity.

Alcohol abuse and/or drug dependencies.

Diseases threatening life in the short term.

Patients who are unable to care for themselves and have no long-term family or social support that will warrant such care.

Severe medical disease that makes anaesthesia or surgery prohibitively risky.

Inability or unwillingness of the patient to change lifestyle postoperatively.

Patient view of surgery as a “magic bullet”.

Noncompliant behaviour.

Untreated gastric ulcer, Crohn’s disease.

Roux-en-Y gastric bypass

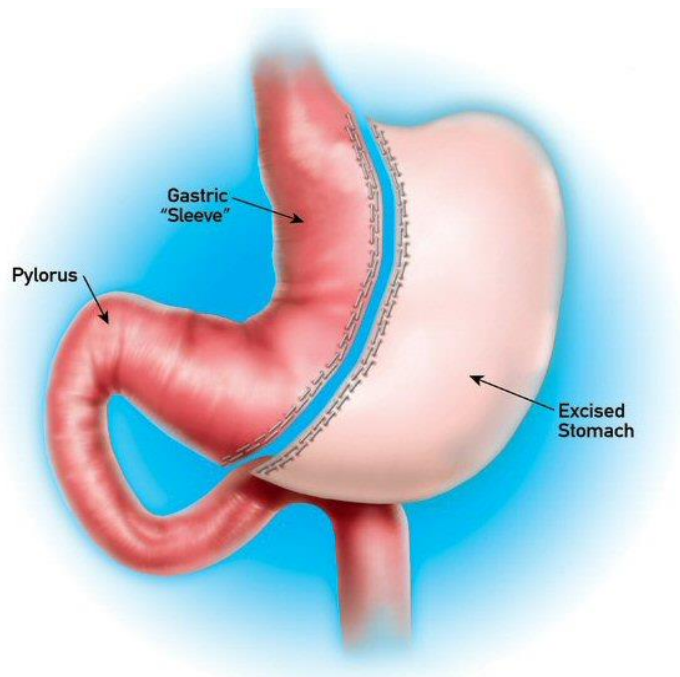
- 30–35% weight loss
- 45–90 kg weight loss
- Neurohormonal mechanism of weight loss



Wharton S, Serodio KJ, Kuk JL, Sivapalan N, Craik A, Aarts MA. Interest, views and perceived barriers to bariatric surgery in patients with morbid obesity. Clin Obes. 2016;6(2):154–60.

Vertical sleeve gastrectomy

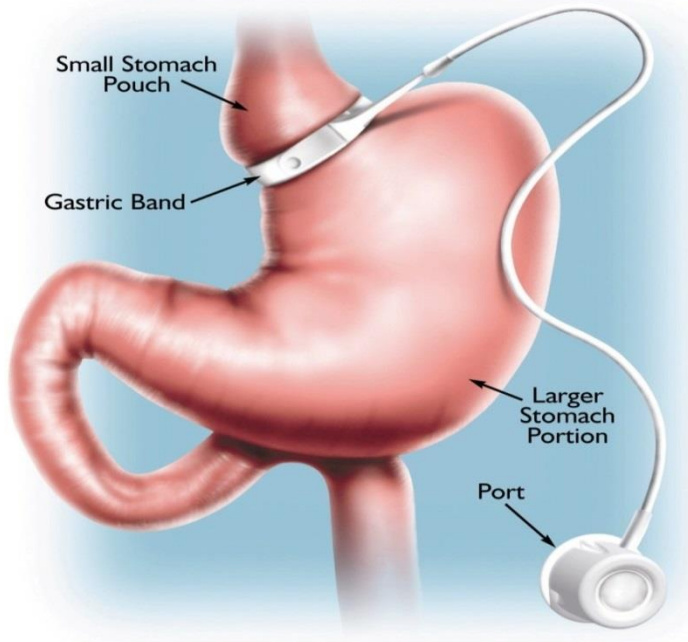
- 25–30% weight loss
- 45–90 kg weight loss
- Neurohormonal mechanism of weight loss



Morino M, Toppino M, Forestieri P, Angrisani L, Allaix ME, Scopinaro N. Mortality after bariatric surgery: analysis of 13,871 morbidly obese patients from a national registry. *Ann Surg.* 2007;246(6):1002–7.

Wharton S, Serodio KJ, Kuk JL, Sivapalan N, Craik A, Aarts MA. Interest, views and perceived barriers to bariatric surgery in patients with morbid obesity. *Clin Obes.* 2016;6(2):154–60.

Lap Band



Decline in the use of gastric banding is due to limited long-term efficacy and the high removal rates of at least 25% at 5 years.

Follow-up after bariatric surgery

- Close follow-up in the first 2 years after surgery, involving the combined work of the hospital-based team and the tier 3 weight management team.
- After 2 years, follow-up consists of an annual check-up with GP.
- Patients need to take lifelong vitamin and mineral supplements.
- Regular blood tests are necessary to ensure there is no deficiency in a variety of vitamins and minerals.

NICE guidelines for bariatric surgery
(<https://www.plymouthhospitals.nhs.uk/nice-guidelines-for-bariatric-surgery>).

Pregnancy and bariatric surgery

- Avoid pregnancy for at least 12 months after surgery.
- Effectiveness of the pill may be reduced after surgery.
- Vitamin and mineral supplements after gastric bypass/sleeve gastrectomy in pregnancy:
 - multivitamin and mineral supplements, iron, folic acid, calcium and vitamin D, vitamin B12.
- Patients who become pregnant following bariatric surgery should undergo nutritional screening every trimester (ferritin, folate, vitamin B12, calcium and fat soluble vitamins).

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Complications of bariatric surgery

- Morbidity and mortality rates associated with bariatric surgery are generally low and comparable to other major abdominal operations such as cholecystectomy, appendectomy and hysterectomy.
- Mortality rate is directly influenced by the expertise of the surgeon and hospital facilities.
- Intraoperative complications include bleeding, injury to surrounding structures and staple misfire.
- Major complication rate following bariatric surgery is approximately 5% to 10%; the most common complications are venous thromboembolism and respiratory complications.

Follow-up

- After bariatric surgery, it is still important to view obesity as a chronic disease.
- Lifelong follow-up of patients is helpful to prevent weight regain and ensure they are meeting their goals.