Case
Emma, a retail assistant aged 26 years, has been obese for the past 15 years. She began gaining weight after her father’s sudden death from an acute myocardial infarction. Emma has been seeing a psychologist and has maintained a nutrition and exercise program. She has chronic knee and back pain. Her body mass index (BMI) is now 37 kg/m². She comes to see you to discuss bariatric–metabolic surgery.

Case continued
Emma’s mother, Patty, also obese, survived an acute myocardial infarction three years ago. She is interested in non-surgical therapies that aid weight loss. You discuss with her a range of medications that are available, including their relative risks and benefits.

Question 1
How soon after bariatric–metabolic surgery is maximum weight loss (usually 20–32%) achieved?
A. 1–2 years
B. 5–6 years
C. 9–10 years
D. 20–30 years

Question 2
A proven benefit from marked weight loss following bariatric–metabolic surgery is:
A. Cessation of insulin in type 2 diabetes
B. Mild reduction of cardiovascular morbidity
C. Improved histological appearance in liver cirrhosis
D. Major improvement in apnoea–hypopnoea index

Question 3
Which surgical procedures would give the best therapeutic weight loss outcome for a young woman with BMI of 37 kg/m²?
A. Roux-en-Y gastric bypass
B. Total gastrectomy
C. Adjustable gastric banding
D. Sleeve gastrectomy

Question 4
Which of the following is considered routine pre-operative preparation for bariatric surgery?
A. Psychiatric referral
B. Micronutrient assessment
C. Cardiologist referral
D. Abdominal ultrasound

Question 5
Abdominal pain and dizziness on day two following bariatric surgery is most likely to indicate:
A. Dehydration
B. Deep vein thrombosis
C. Bowel infection
D. Dumping syndrome
E. Low iron and glucose

Question 6
Which one of the following is NOT a long term complication of bariatric–metabolic surgery?
A. Microcytic anaemia
B. Macrocytic anaemia
C. Weight regain
D. Dumping syndrome
E. Diverticular disease

Question 7
Which of the following is considered routine post-operative follow-up for bariatric surgery?
A. Maintenance of insulin dosage
B. Reduction in lipid-lowering drugs
C. Maintenance of strength training
D. Discontinuation of antihypertensive agents

Question 8
Which of the following is NOT a contraindication for prescribing phentermine long term?
A. Cardiovascular disease
B. Psychiatric disease
C. History of substance abuse
D. Gluten enteropathy

Question 9
A documented mode of action for weight loss with orlistat is:
CLINICAL CHALLENGE

A. enhanced pancreatic lipases  
B. enhanced gastric lipases  
C. reduced absorption of dietary fat  
D. appetite suppression  

**Question 10**  
The most common side effect of orlistat is:  
A. Gastrointestinal disturbance  
B. Increase in glycated haemoglobin  
C. Kidney stones  
D. Vitamin B complex deficiency  

**Question 11**  
Which cardiometabolic risk factor is NOT improved by liraglutide?  
A. Inflammatory markers  
B. Glycaemic parameters  
C. Blood pressure  
D. Uric acid levels  

**Question 12**  
Which one of the following is NOT a common side effect of topiramate?  
A. Gout  
B. Paraesthesia  
C. Dry mouth  
D. Insomnia  

**Case continued**  
Patty has heard that sleep disturbance may be part of the problem. She has a history of snoring and waking feeling tired. She agrees to a sleep study. She is interested in hearing more about continuous positive airway pressure (CPAP) machines used for obstructive sleep apnoea (OSA).  

**Question 13**  
Which one of the following has NOT been shown as a proven benefit from CPAP therapy?  
A. Improved quality of life  
B. Substantive weight loss  
C. Decreased daytime sleepiness  
D. Improved depression scores  

**Case continued**  
Patty wonders if Emma’s obesity may have in fact started much earlier, when she was a child.  

**Question 14**  
The definition of obesity in the paediatric population in Australia is:  
A. BMI >30 kg/m²  
B. >97th percentile BMI for age  
C. BMI >25 kg/m²  
D. >85th percentile BMI for age  

**Question 15**  
What is the probability of that a woman who is morbidly obese will lose 5% total weight over one year?  
A. One in 20  
B. One in 124  
C. One in seven  
D. One in 677  

**Case continued**  
Patty has been following new ideas in obesity management and asks about leptin. You know that leptin is currently under investigation as a possible target for new obesity medications.  

**Question 16**  
Which one of the following best describes the effect of leptin?  
A. Extreme hyperphagia  
B. Hypogonadism  
C. Reduced sympathetic tone  
D. Satiety  

**Question 17**  
Where in the body is leptin produced?  
A. Hypothalamus  
B. Fat cells  
C. Central nervous system  
D. Arcuate nucleus