



CLINICAL GUIDELINE

Obese Surgical Patient Preoperative Management

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

WHO classification of obesity

Classification	BMI (kg/m ²)
Underweight	<18.5
Healthy weight	19-24.9
Overweight	25-29.9
Obese 1	30-34.9
Obese 2	35-39.9
Obese 3	>40

Waist circumference, measured using tape measure around abdomen level with umbilicus, of >102cm in men and > 88cm in women or a waist to height ratio greater than 0.55, indicates these patients are more at risk of cardiovascular complications^[1] and they are more likely to exhibit the metabolic syndrome^[2], which consists of central obesity, hypertension, insulin resistance and hypercholesterolemia.

Multisystem disorders in obesity^[3]. Patients require thorough pre-assessment.

Organ System	Issues	Organ System	Issues
Cardiovascular	Hypertension Ischaemic Heart Disease Cardiomyopathy Cardiac Failure Arrhythmias (eg. AF; Prolonged QT interval; Sudden Cardiac Death)	Respiratory	Airway Obstructive Sleep Apnoea Ventilation Wheeze (may be due to airway closure rather than asthma)
GI	Hiatus Hernia Increased Aspiration Risk Gallstones Fatty Liver	Endocrine	Insulin Resistance
Others	Abnormal Drug Handling Difficult Venous access		

STOP-BANG Questionnaire used to aid detection of patients with OSA [4] [5]. Please refer to pre-assessment Screening for OSA and Day Surgery & OSA (NHSGGC guidelines).

S	Snoring: Do you snore loudly (louder than talking or heard through a closed door?)
T	Tired: Do you often feel tired, fatigued or sleepy during the daytime? Do you fall asleep in the daytime?
O	Observed: Has anyone observed you stop breathing or choking or gasping during your sleep?
P	Blood Pressure: Do you have or are you being treated for high blood pressure?
B	BMI: BMI >35 kg/m ²
A	Age: Age >50 years
N	Neck: Circumference >40cm
G	Gender: Male

Mild Risk: ≤ 2 Moderate Risk: 3-4 High Risk: ≥ 5

With Permission from
SOBA Single Sheet Guideline

Poor functional capacity
Abnormal ECG
Uncontrolled BP / IHD
SpO₂ < 95% on air
Poorly controlled asthma / COPD
Previous DVT / PE
STOPBang ≥ 5

YES

Consider:
Blood gases / Sleep studies
Preop CPAP
Echocardiogram
Cardiorespiratory referral

NO

Need experienced anaesthetic team
If major surgery consider HDU

May be suitable as Day Case surgery

The following features may indicate the presence of significant underlying respiratory disease (Obesity Hypoventilation Syndrome) and should prompt consideration of pre-operative arterial blood gas analysis ^[6]:

- Respiratory wheeze at rest
- SpO₂ < 95% on air
- Serum bicarbonate > 27 mmol/L
- FVC < 3L or FEV₁ < 1.5L

If there is any suspicion of OSA/OHS, consider sleep studies.

Reducing DVT Risk ^[8]:

- All patients should be carefully assessed for their risk of thromboemboli
- Encourage weight loss
- Stop smoking pre-operatively
- If appropriate, stop HRT & oestrogen containing contraception 4 weeks prior to surgery (ensuring adequate alternative contraception)

Patients with adjustable gastric bands in situ

Laparoscopic adjustable gastric banding (LAGB) is a recognised treatment for obesity. However, patients with a LAGB in situ are at increased risk of pulmonary aspiration during induction of general anaesthesia due to oesophageal dilatation above the band ^[9]. For a patient having a general anaesthetic, it is recommended that the band is deflated pre-operatively and reinflated before or soon after hospital discharge ^[10].

To arrange deflation of bands in GRI patients please contact: 0141 211 4413, Eileen.Mitchell@ggc.scot.nhs.uk

To arrange deflation of bands in QEUH patients please contact: 0141 211 3014, Gwen.Thomson@ggc.scot.nhs.uk