

Principles of caring for women with BMI>40 Obese class 3

A particular concern in ART, and a focus of these guidelines, is increasing problem of severe obesity (BMI>40) and the prevalence of diabetes, vascular disease and thromboembolic disorders in this population. These women are also at risk of respiratory difficulties and anaesthetic risks.

The following is the recommended:

1. Obesity should not be the sole reason for denying fertility treatment. Generally aim not to deny treatment based on a specific BMI but try to work together to a positive outcome. Noting that the RANZCOG recommend an upper limit of 35 for fertility treatment, there are significant ethical and medical arguments against having a BMI threshold (Tremellen 2017).
2. Determine the cause of infertility independent of obesity
3. In women with anovulatory infertility 5% weight loss can restore fertility. Institute weight loss program – refer or self-manage. Average weight loss in these programs is 5kg. These interventions have a high dropout rate and do not increase live birth rate in unexplained infertility
4. Calorie restriction
5. Appetite suppression – medications such as duromine, saxenda. Please note that long acting GLP-1 analogues such as Ozempic be stopped at least 2 months prior to pregnancy.
6. Exercise
7. Psychological support
8. If a weight loss program is unsuccessful or inadequate, consider referral for bariatric surgery. However due to the 12 month delay in pregnancy after bariatric surgery age needs to be taken into account when making this decision.
9. Discuss the difficulties with IVF treatment – dose response, anaesthetic complications and need to have egg collection in a hospital rather than a day surgery, limited ovarian access, impact on egg quality
10. Discuss and document complications in pregnancy – see below – 3 x increased risk of hypertensive disorder and 5 x increased risk of gestational diabetes
11. Assess metabolic and cardiac fitness and consider referral to obstetric physician/anaesthetist
12. Management should be multidisciplinary and involve the patient in the process of shared decision making

Relative risk of pregnancy complications compared to Normal BMI (112,309 singleton deliveries among mothers without chronic disease – the US Consortium on Safe Labor)



	Normal %	BMI 30 % (RR)	BMI 35 % (RR)	BMI 40 % (RR)
Hypertensive disorder	5	11 (2.3)	13 (2.7)	17 (3.5)
GDM	2.8	8.3 (2.9)	10.8 (3.9)	14.6 (5.4)
Caesarean delivery	22.4	33.9 (1.5)	38.2 (1.7)	46.9 (2.0)
Preterm delivery <32 weeks	1.4	2.1 (1.28)	2.2 (1.3)	2.4 (1.38)
Large for dates	7.9	13.7 (1.7)	14.9 (1.9)	17.3 (2.3)
NICU admission	8.9	11.5 (1.2)	12.8 (1.3)	14.5 (1.38)

adapted from Kim SS, Zhu Y, Grantz KL, Hinkle SN, Chen Z, Wallace ME, Smarr MM, Epps NM, Mendola P. Obstetric and Neonatal Risks Among Obese Women Without Chronic Disease. *Obstet Gynecol.* 2016 Jul;128(1):104-112. doi: 10.1097/AOG.0000000000001465. PMID: 27275800; PMCID: PMC4917420.

Reference

Obesity and Reproduction: a committee opinion *Fertil Steril* 2021;116:1266-85.

Tremellen K, Wilkinson D, Savulescu J. Should obese women's access to assisted fertility treatment be limited? A scientific and ethical analysis. *Aust N Z J Obstet Gynaecol.* 2017 Oct;57(5):569-574.

[Repromed extreme BMI policy \(BMI 40-45\)](#)

Overview

This policy specifically relates specifically to women with a BMI between 40 and 45 kg/m2 in the absence of other serious co-morbidities in which the treating IVF doctor believes an OPU at Repromed may be permissible. The final decision on proceeding to sedation lies with the anaesthetist on the day of planned surgery.

High BMI patients with significant co-morbidities should still be managed at Ashford Hospital, or their procedure performed at Repromed under LA and Pentrox without sedation. If you are uncertain if the patient has a significant co-morbidity- please discuss with Adelaide Anaesthetics or send the patient for a pre-operative consultation.

Please also refer to [DSU admission criteria policy](#) and [DSU Antimicrobial Stewardship Policy](#).

Background

It is acknowledged that women of extreme BMI pose significantly increased anaesthetic risks, which must be explained by clinician and documented in patient record. Specifically, these anaesthetic risks include difficulty in maintaining an adequate airway, gastro-oesophageal reflux and resulting aspiration and the need for significantly higher doses of sedation resulting in slower post-operative recovery. In relation to operative risks, poor vision of the pelvic structures due to attenuation of the ultrasound and the ovaries moving with respiration are two concerns more seen in obese patients.



In order to mitigate these risks, the following steps should be taken:

1. A BMI measurement taken by the clinic in the last 2 months must be available when the patient books on for IVF. This allows for accurate triage of patients.
2. Medications such as GLP-1 analogues (Saxenda, Ozempic) delay gastric emptying and must be ceased 2 weeks before the OPU to reduce aspiration risk.
3. Patients with a history of significant Gastroesophageal Reflux disease should be requested to take 40 mg of Nexium on the night before OPU in order to neutralize stomach acid and minimise aspiration risks.
4. All extreme obesity patients must fast from midnight for solids and for a minimum of 6 hours prior to procedure for clear fluids to reduce aspiration risk.
5. Extreme obesity patients will be allocated a 40 minute theatre time slot to allow for the extended anaesthetic consultation, delayed recovery and prolonged operation time.
6. The high flow oxygen machine must be primed and available before starting a theatre list with a woman with an extreme BMI. This will be used intra-operatively and in stage one recovery until full regaining of conscious state. As Repromed only has one high flow oxygen machine available, this mandates that we do not book two extreme BMI patients in succession on the theatre list.
7. To minimise the dose of sedation used, it is preferable that the surgeon administers LA into the vaginal wall if possible.
8. Universal antibiotic cover is preferable given the higher risk of infection (compromised immune system, poor vision with higher risk of inadvertent visceral injury).
9. Please note that extreme BMI patients (BMI 40-45) will be assessed on the day of surgery by the scheduled anaesthetist, with the possibility of conversion to local anaesthetic. Gynae procedures as part of OPU procedure or stand-alone procedure may be cancelled by the anaesthetist if assessed to be unsafe for sedation.

NOTE: As per the Repromed Dulwich DSU Admission Criteria

Patients with a BMI >45-50 may be considered for a procedure under local anaesthetic at Repromed DSU with the decision made by treating doctor depending on clinical evaluation and risk assessment. This assessment must be documented in the patients notes.

Patients with a BMI greater than 50 wishing to consider an OPU procedure under local anaesthetic at Repromed DSU must have a clinical evaluation and Risk Assessment by the Medical Director or delegate prior to starting treatment, and the decision on whether to proceed with treatment, and any additional precautions, must be documented in the patient file.

NOTE: Patients with a BMI >50 cannot be referred to Ashford for OPU procedures.

NOTE Darwin – no local option. If BMI greater than permissible in Darwin Day Surgery as per their admission criteria consider referral to SA.



If having difficulty with canulation request support from AA which will be provided at a small fee and if canulation is not possible we can not proceed.

The above information can be found in “Reproductive health management clinical guidelines” document, on the Repromed intranet. Please refer to the full document.