Obesity in pregnancy

Pre and inter-conception

- Analysis of BMI and waist circumference
- Risk counselling – increased risk of adverse maternal and fetal outcome
- Discuss benefits of inter-pregnancy weight loss – refer to dietitian, stabilise weight loss before conception
- Advise re lifestyle interventions – weight loss, activity, behaviour modification, smoking cessation
- Folic Acid 5 mg daily at least one month prior to conception

Antenatal

- Comprehensive history (including previous bariatric surgery)
- Document pre-pregnancy BMI
- Folic Acid 5 mg daily until 12 weeks
- Initial laboratory investigations (BMI >30 kg/m^2):
  - OGTT or HbA1c at entry to care
  - Baseline liver and renal function, transaminases
  - Urine protein creatinine ratio
- Develop care plan with woman that identifies strategies to reduce risk
- Referrals:
  - Dietetic services for nutritional advice
  - If BMI > 35 kg/m^2, obstetric consult
  - If BMI > 40 kg/m^2, anaesthetic consult
  - Other specialist referrals as indicated
- Counsel about:
  - Maternal and fetal risks of obesity
  - Implications for birthing, model of care, breastfeeding and transfer of care
  - Recommended weight gain during pregnancy
  - Physical activity
- Clinical assessments:
  - Document GWG at each visit
  - Risk of VTE
  - Surveillance for preeclampsia – consider low dose aspirin
  - If initial OGTT/HbA1c negative, repeat OGTT at 24–28 weeks
  - Fetal surveillance to identify/exclude fetal malformations, macrosomia, growth restriction
  - Awareness of psychosocial wellbeing

Labour and birth

- Team approach with frequent communication between care providers
- Obesity alone not an indication for IOL or CS
- Ensure bariatric equipment available intra and postpartum
- Early consultation with anaesthetist/operating theatre
- Early assessment of IV access
- If BMI > 35 kg/m^2 water immersion not recommended
- If BMI > 40 kg/m^2 recommend continuous fetal monitoring
- If CS, give higher dose prophylactic antibiotics
- Surveillance for increased risk of shoulder dystocia/PPH
- Active third stage management
- Consider need for blood products

Postpartum

- Surveillance for risk of airway compromise (particularly after narcotics, sedatives)
- Encourage early mobilisation
- Actively assess risk of VTE and requirement for thromboprophylaxis
- Increased surveillance for wound infection
- Additional support for breastfeeding
- Advice re: bed sharing/co-sleeping
- Counselling/referral for ongoing lifestyle interventions
- If GDM, repeat OGTT at 6–12 weeks

Principles of care

- Plan care in consultation with the woman
- Use clinical judgement to provide a safe service
- Determine local criteria for safe care provision
- Liaise/consult early with anaesthetist
- Use multidisciplinary case review
- Ensure necessary resources available (human and equipment)
- Audit care

BMI calculation (kg/m^2)

- Use pre-pregnancy weight to calculate BMI at entry to care
- As part of the overall assessment for safe birth:
  - Monitor GWG throughout pregnancy
  - Recalculate BMI at 36 weeks
- BMI impacted by ethnic variations

BMI classification (kg/m^2)

Underweight	< 18.5
Normal	18.5–24.9
Overweight	25.0– 29.9
Obese I	30.0–34.9
Obese II	35.0–39.9
Obese III	> 40
Extreme obesity	> 50

Gestational weight gain

Trimester 1	kg
All women	0.5-2.0
Trimester 2+3	**(kg/week)**
Underweight	0.45
Normal	0.45
Overweight	0.28
Obese	0.22
Total GWG	**kg**
Underweight	12.5–18
Normal	11.5–16
Overweight	7–11.5
Obese	5–9

BMI: body mass index, **CS:** caesarean section, **GDM:** gestational diabetes mellitus **GWG:** gestational weight gain, **IOL:** induction of labour, **OGTT:** oral glucose tolerance test, **PPH:** postpartum haemorrhage, **VTE:** venous thromboembolism, **>** greater than, **<** less than

Document Number: F15.14-1-V1-R20