Management of Women with Obesity in Pregnancy

While the majority of the recommendations within this guideline pertain to women with a BMI ≥30, some recommendations are specific to women in the higher classes of obesity only. Obese women with a BMI below the threshold specified may also benefit from the particular recommendation; however, the chosen BMI cut-offs reflect careful consideration given to the balance of medical intervention versus risk, differences in local prevalence of maternal obesity, and resource implications for local healthcare organisations. Local maternity services may wish to implement these standards for all women with maternal obesity after consideration of these issues.

The recommendations cover interventions prior to conception, during and after pregnancy.

Background and introduction

Obesity in pregnancy is associated with an increased risk of a number of serious adverse outcomes, including miscarriage, fetal congenital anomaly, thromboembolism, gestational diabetes, pre-eclampsia, dysfunctional labour, postpartum haemorrhage, wound infections, stillbirth and neonatal death. There is a higher caesarean section rate\(^{17}\) and lower breastfeeding rate\(^{18}\) in this group of women compared to women with a healthy BMI. There is also evidence to suggest that obesity may be a risk factor for maternal death: the Confidential Enquiry into Maternal and Child Health’s report on maternal deaths in the 2003–2005 triennium showed that 28% of mothers who died were obese, whereas the prevalence of obesity in the general maternity population within the same time period was 16-19%.

Pre-pregnancy care

What care should be provided in the primary care setting to women with obesity of childbearing age?

- Primary care services should ensure that all women of childbearing age have the opportunity to optimise their weight before pregnancy. Advice on weight and lifestyle should be given during family planning consultations, and weight, body mass index and waist circumference should be regularly monitored.
- Women of childbearing age with a BMI ≥30 should receive information and advice about the risks of obesity during pregnancy and childbirth, and be supported to lose weight before conception.

What nutritional supplements should be recommended to women with obesity who wish to become pregnant?

- Women with a BMI ≥30 wishing to become pregnant should be advised to take 5mg folic acid supplementation daily, starting at least one month before conception and continuing during the first trimester of pregnancy.
Health professionals should take particular care to check that women with a booking BMI ≥30 are following advice to take 10 micrograms Vitamin D supplementation daily during pregnancy and while breastfeeding.

**Provision of antenatal care**

*How should antenatal care be provided for women with obesity?*

- Management of women with obesity in pregnancy should be integrated into all antenatal clinics, with clear policies and guidelines for care available.

**Information-giving during pregnancy**

*What information should be provided to women with maternal obesity?*

- All pregnant women with a booking BMI ≥30 should be provided with accurate and accessible information about the risks associated with obesity in pregnancy and how they may be minimised. Women should be given the opportunity to discuss this information.

**Risk assessment during pregnancy**

*What specific risk assessments are required for women with maternal obesity?*

- Pregnant women with a booking BMI ≥40 should have an antenatal consultation with an obstetric anaesthetist, so that potential difficulties with venous access, regional or general anaesthesia can be identified. An anaesthetic management plan for labour and delivery should be discussed and documented in the medical records.
- Women with a booking BMI ≥40 should have a documented assessment in the third trimester of pregnancy by an appropriately qualified professional to determine manual handing requirements for childbirth and consider tissue viability issues.

**Maternal surveillance and screening**

*What specific considerations should be given to maternal surveillance for women with obesity?*

- An appropriate size of arm cuff should be used for blood pressure measurements taken at the booking visit and all subsequent antenatal consultations. The cuff size used should be documented in the medical records.
- Women with a booking BMI ≥35 have an increased risk of pre-eclampsia and should have surveillance during pregnancy in accordance with Pre-eclampsia Community Guideline (PRECOG), 2004.
- All pregnant women with a booking BMI ≥30 should be screened for gestational diabetes, as recommended by the NICE Clinical Guideline No. 63 (Diabetes in Pregnancy, July 2008).

**Planning labour and delivery**

*What should be discussed with women with maternal obesity regarding labour and delivery?*
Women with a booking BMI ≥30 should have an informed discussion antenatally about possible intrapartum complications associated with a high BMI, and management strategies considered. This should be documented in the notes.

Women with a booking BMI ≥30 should have an individualised decision for VBAC (vaginal birth after caesarean) following informed discussion and consideration of all relevant clinical factors.

Care during childbirth

*Where should women with obesity give birth?*

- Women with a BMI ≥35 should give birth in a consultant-led obstetric unit with appropriate neonatal services, as recommended by the NICE Clinical Guidelines No. 55 (Intrapartum Care, September 2007).

Postnatal care and follow-up after pregnancy

*What ongoing care should be provided to women with maternal obesity following pregnancy?*

- Women with a booking BMI ≥30 should continue to receive nutritional advice following childbirth from an appropriately trained professional, with a view to weight reduction.
- All women with a booking BMI ≥30 who have been diagnosed with gestational diabetes should have a test of glucose tolerance approximately 6 weeks after giving birth.
- Women with a booking BMI ≥30 and gestational diabetes who have a normal test of glucose tolerance following childbirth, should have regular follow up with the GP to screen for the development of type 2 diabetes.
- All women with a booking BMI ≥30 who have been diagnosed with gestational diabetes should have an annual screening for cardio-metabolic risk factors, and be offered lifestyle and weight management advice.