Post-term Pregnancy (Prolonged Pregnancy)

Prolonged pregnancy is defined as pregnancy which progresses beyond 42 weeks.[1] Prolonged pregnancy is associated with fetal, neonatal and maternal complications. Risks increase after term and significantly so after 41 weeks of pregnancy. A policy of induction of labour appears to improve outcomes and reduce perinatal mortality. Where possible, first trimester ultrasound rather than last menstrual period (LMP) dating should be relied on to assess pregnancy duration. This should be determined using crown-rump measurement or head circumference if crown-rump length is above 84 mm.[3]

Risks associated with post-term pregnancy[4]

Fetal and neonatal risks
Prolonged pregnancy is associated with an increase in perinatal morbidity and mortality. There is an increased risk of stillbirth and neonatal death, as well as an increase in risk of death in the first year of life. The increased mortality is thought to be due to factors such as utero-placental insufficiency, meconium aspiration and intrauterine infection.

Fetal morbidity is also increased, with higher risks of:

- Meconium aspiration.
- Macrosomia and larger babies resulting in:
  - Prolonged labour.
  - Cephalo-pelvic disproportion.
  - Shoulder dystocia.
  - Birth injury resulting in, for example, brachial plexus damage or cerebral palsy.
- Neonatal acidaemia.
- Low five-minute Apgar scores.
- Neonatal encephalopathy.
- Neonatal seizures.
- Features of intrauterine growth restriction (IUGR) due to placental insufficiency.

Maternal risks
Prolonged pregnancy is also associated with increased risk for the mother, including:

- Obstructed labour
- Perineal damage
- Instrumental vaginal delivery
- Caesarean section
- Postpartum haemorrhage
- Infection

Where labour is induced before the uterus or cervix are in a favourable state, obstetric problems may follow which can have an adverse effect on either mother or baby, including:

- Need for caesarean section.
- Prolonged labour.
- Postpartum haemorrhage.
- Traumatic delivery.
Epidemiology

- The use of ultrasound in early pregnancy for precise dating is thought to reduce the number of post-term pregnancies compared to dating based on the LMP [5].
- 5-10% of pregnancies are prolonged beyond 42 weeks. [1]
- Around 20% of pregnant women will need induction of labour - the majority for post-term pregnancy. [6]

Risk factors [4]

- Previous post-term pregnancy increases the risk of recurrence in subsequent pregnancies.
- Primigravidity.
- High maternal BMI is associated with longer gestation and increased rate of induction of labour. [7] Elevated pre-pregnancy weight and maternal weight gain both increase the risk of a post-term delivery. [6]
- Genetic factors. There is an increased risk of post-term pregnancy for mothers who were themselves born post-term and twin studies also suggest a genetic role.
- Advanced maternal age. [9]

Presentation

Symptoms

- When post-term, the neonate has lower than normal amounts of subcutaneous fat and reduced mass of soft tissue.
- The skin may be loose, flaky and dry.
- Fingernails and toenails may be longer than usual and stained yellow from meconium.

Signs

- Before delivery there may be reduced fetal movement.
- A reduced volume of amniotic fluid may cause a reduction in the size of the uterus.
- Meconium-stained amniotic fluid may be seen when the membranes have ruptured.

Management

Increasing evidence shows that a policy of induction of labour is associated with fewer perinatal deaths and fewer caesarean sections when compared to expectant management. [2] The Royal College of Obstetricians and Gynaecologists (RCOG)/National Institute for Health and Care Excellence (NICE) guidelines recommend that women should be offered induction after 41 weeks between 41+0 and 42+0 weeks to avoid the risks of post-term pregnancy, primarily increased intrauterine fetal death. [1] Prior to formal induction of labour, women should be offered vaginal examination with membrane sweeping. [3] If women choose not to have induction, this decision should be respected and from 42 weeks of pregnancy there should be increased monitoring with at least twice-weekly cardiotocography and ultrasound estimation of maximum amniotic pool depth.

Studies have also looked at the outcomes when labour is induced between 37 and 41 weeks of pregnancy and it appears to also reduce perinatal mortality without increasing risk of operative delivery. [6]

Further reading & references

- Induction of labour; NICE Clinical Guideline (July 2008)
- Antenatal care for uncomplicated pregnancies; NICE Clinical Guideline (March 2008, updated 2017)

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. EMIS has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our conditions.