CLINICAL PRACTICE GUIDELINE

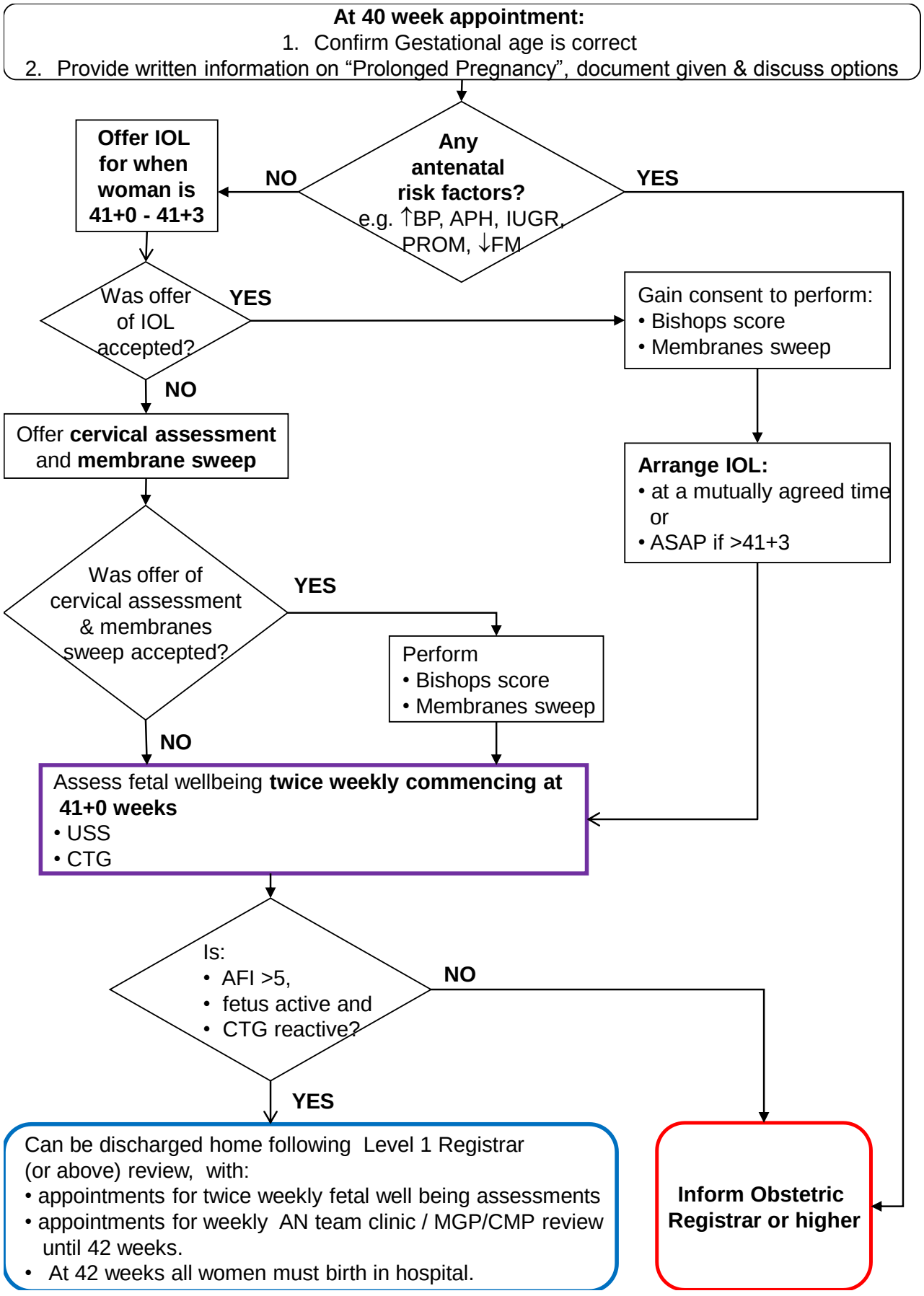
Prolonged pregnancy:

Care beyond 40 weeks gestation

This document should be read in conjunction with the Disclaimer

Contents

Quick reference guide: Beyond 40 weeks



Management of pregnancy beyond 40 weeks

Aim

- Pregnancy planning and management for when the woman is ≥41+0 weeks gestation

Background information

Prolonged pregnancy, otherwise referred to as post term or postdates pregnancy is defined as a pregnancy that has progressed beyond 42 weeks gestation.[1, 2] Of all pregnancies, 5-10% are post term[3], although the rate is declining in Australia possibly due to different intervention strategies.[4] Accurate assessment of gestational age is essential to prevent misdiagnosis of prolonged pregnancy. Male fetuses, genetic predisposition[5], a history of a previous post term pregnancy, and obesity are all associated with increasing the risk for a prolonged pregnancy.[5]

The perinatal mortality rate at 40 weeks gestation approximately doubles by 42+0 weeks (2-3 deaths versus 4-7 deaths per 1000 births) and increases by 6 fold and higher at 43 weeks and beyond.[5]

Increased morbidity related to post term pregnancy includes risk of fetal distress, shoulder dystocia, labour dysfunction and obstetric trauma. Perinatal complications include meconium aspiration, asphyxia, fractured bones, peripheral nerve damage, pneumonia and septicaemia.[6]

Current evidence does not support the use of acupuncture, homeopathy, herbal supplements, castor oil, hot baths, enemas or sexual intercourse to induce labour.[1] Sweeping of the membranes can decrease the need for formal induction of labour by causing the release of endogenous prostaglandins.

Key points

1. The estimated date of delivery (EDD) should be checked, as a common cause of considering a pregnancy to be prolonged is inaccurate dating.[5]
2. Low risk women should be offered IOL after 41^{+0} weeks gestation and depending on availability of places have their IOL booked to occur by 41^{+3} weeks gestation.
3. At 40 weeks gestation all women should be provided with information on 'Management of Prolonged Pregnancy'. Refer the woman to 'Management of Prolonged Pregnancy' in section 'Between 40 and 42 weeks' in her KEMH Pregnancy, Birth and your Baby book (PDF 5.9MB). Document that the book section has been referred to. Discuss prolonged pregnancy, induction of labour[3] and fetal monitoring required for pregnancies more than 41 weeks gestation.
4. Regular fetal surveillance should be offered to low risk women who chose expectant management after 41 weeks. While the literature suggests cardiotocography and Doppler have no significant benefit in predicting

outcomes for pregnancies beyond 41^{+0} weeks, international guidelines recommend increased antenatal surveillance from 41^{+0} weeks. Consensus and expert opinion recommends twice weekly assessment of fetal welfare from 41^{+0} weeks gestation including as a minimum:

- The estimation of amniotic fluid volume to provide information regarding the placental function over the preceding week and
- The evaluation of the antenatal fetal heart rate pattern to provide information on the fetal condition at the point of time of testing

5. Membrane sweeping is associated with a reduction in need for formal induction particularly with multiparous women, increasing the rate of spontaneous labour, although it may increase the incidence of uncomplicated bleeding and pain for women.[1, 7]
6. MGP and CMP women who labour spontaneously between 41 and 42 weeks gestation and have consented to ongoing fetal surveillance may continue to receive clinical care through these models including birthing in the Family Birth Centre or at home.
7. Women receiving care from the FBC/MGP or CMP must birth in hospital from 42 weeks gestation.

Management

1. Confirm gestational age is correct:
    - A **first trimester ultrasound** EDD should be used in preference to the last menstrual period (LMP) if there is a **difference of more than 5 days**.[3]
    - When there is a **difference of more than 10 days** between LMP and **second trimester** ultrasound EDD's, the EDD should be adjusted to the second trimester ultrasound EDD.[3]
    - When there is a first trimester and second trimester ultrasound available the ultrasound EDD should be determined by the first trimester scan.[3]
    - If the LMP was certain and regular, and **no ultrasounds** between 6 and 24 weeks of pregnancy, then use the LMP EDD. If **LMP uncertain or irregular**, and ultrasound performed between 6 – 24 weeks, then use ultrasound EDD.[3]
2. At 40 weeks gestation initiate discussion regarding management options of pregnancy at 41 weeks gestation. The discussion should include:
    - Maternal and fetal risks (see point 4 below)
    - Options of management. Offer and book induction of labour (IOL) and document this.
    - Fetal surveillance is recommended after 41+0 weeks gestation
    - The woman's expectations and preferred options.

3. Assess whether any antenatal risk factors are present. If any of the following are present refer to the Obstetric Registrar or higher for review:
    - Increased blood pressure (↑BP)
    - History of antepartum haemorrhage
    - More than one attendance with reduced fetal movements (↓FM)
    - Intrauterine growth restriction (IUGR)
    - Significant medical conditions
    - Pre-labour rupture of membranes (PROM)
    - Maternal age ≥ 40 years and a first pregnancy
4. If no risk factors, offer an IOL (with Bishops score +/- membrane sweep- unless contraindicated).
5. Booking IOL: it is recommended that IOL is not booked at a gestation > 41 + 3 weeks
    a. If the woman is <41+3 weeks, then book IOL for mutually agreed time.
    b. If the woman is >41+3 weeks, then arrange IOL for as soon as possible.
6. If IOL is declined, offer cervical assessment and membrane sweep (unless contraindicated).
7. From 41 weeks gestation fetal wellbeing is to be assessed by:
    a. Twice weekly CTG monitoring and
    b. Twice weekly ultrasound examinations to measure amniotic fluid index (AFI).
    c. The CTG and USS must be reviewed by a Registrar or above
8. Arrange follow up appointment at 42 weeks gestation with the clinic / MGP or CMP
9. At 42 weeks gestation all women must be referred to a specialist for ongoing care and birth management.

Membrane sweeping

Background

This intervention has the potential to initiate labour by increasing local production of prostaglandins and thus, reduce pregnancy duration or pre-empt formal induction of labour with either oxytocin, prostaglandins or amniotomy.[7] The ideal gestation at which to commence membrane sweeping is controversial and optimal frequency is unknown.[8]

Key points

1. Consider offering membrane sweeping to women scheduled for formal induction of labour for prolonged pregnancy.[3] There is no evidence supporting

any increase in maternal or foetal morbidity therefore suggesting that membrane sweeping is a safe procedure to offer to all low risk pregnant women.[9]

2. Membrane sweeping may be performed in Group B Streptococcus-positive women with studies showing no increase in adverse outcomes.[3, 8] However, there are no data in relation to women with human immunodeficiency virus (HIV) or hepatitis infection.[3, 8]
3. Prior to formal induction of labour, when a vaginal examination is carried out to assess the cervix, women may be offered membrane sweeping [10] if they meet the criteria below.

Criteria

- Low risk nulliparous/multiparous women may be offered a vaginal examination for membrane sweeping at 40-41 weeks.
- High risk maternal or fetal history requiring induction of labour prior to 40 weeks must be discussed with obstetric staff to determine if membrane sweeping is appropriate.

Procedure

1. Women must consent to the procedure including information on the potential for:
   - Discomfort and pain[3]
   - Bleeding and irregular contractions following procedure[3]
2. The clinician must always check that there is no evidence of a low-lying placental site or other contraindications before stretch and sweep offered.[8]
3. Ask women to empty their bladder, and encourage relaxed breathing techniques.[11]
4. Perform an abdominal palpation, and listen to the fetal heart before assessment of the cervix.[11]
5. If the cervix is open, insert one finger through the internal os of the cervix, to separate the amniotic sac from the uterine wall and cervix by making circular sweeping movements as tolerated by the woman.[11]
6. Auscultate the fetal heart following the procedure.
7. Inform the woman that if there is any fresh blood loss, spontaneous rupture of membranes, or she is not coping with the pain to contact the hospital or their midwife for further advice.[11]
8. Documentation should be recorded in the woman's National Woman-Held Pregnancy Record (MR220) and on the antenatal paperwork.
9. If labour does not occur spontaneously, then arrangements for formal induction should be made as per KEMH guidelines.

Midwifery assessment ≥41^{+0} weeks gestation

Instruction	Criteria	Role of the Midwife
Registered Midwives, working within King Edward Memorial Hospital for Women (including Midwifery Group Practice) or the Community Midwifery Program, may assess women considered to have a prolonged pregnancy and book these women for an induction of labour (IOL) **Note:** This order only applies to women meeting the criteria outlined opposite.	**Inclusion criteria:** Women with a gestation of > 41 weeks with no fetal or maternal criteria excluding them from an IOL booking by a midwife. **NB** The woman must agree to an ultrasound scan and CTG at 41 weeks gestation and to twice weekly CTGs thereafter, with review by the obstetric team at 42 weeks **Exclusion criteria** are: • Uncertain / unreliable estimation of gestational age • Hypertensive complication in pregnancy (e.g. pre-eclampsia, eclampsia, gestational or chronic hypertension) • Oligo / polyhydramnios • Fetal compromise (e.g. abnormalities, intrauterine growth restriction, isoimmunisation, abnormal heart rate patterns) • Fetal demise • Breech presentation/ transverse, oblique or unstable lie • Presenting part above the pelvic inlet • Multiple pregnancy • Maternal medical condition e.g. diabetes, renal, cardiac, pulmonary • Maternal obstetric conditions e.g. previous caesarean section or uterine surgery, antepartum haemorrhage, low lying placenta or placenta praevia, grande multiparity, poor obstetric history, previous cephalopelvic disproportion, previous precipitate labour, prolonged rupture of the membranes).	1. Ensure the woman is informed and counselled appropriately[12] as to the reason for this assessment. 2. Assess the woman and her pregnancy as to the advisability of inducing labour for a prolonged pregnancy. For assessment / management & for Obstetric team review if exclusion criteria are present, follow previous sections: Prolonged Pregnancy QRG and Management of Pregnancy Beyond 41 weeks 3. Offer verbal and written (if not previously given) information on the Management of Prolonged Pregnancy and Induction of Labour,[12] as appropriate. 4. Document care in the medical record.

Note: All women who do not attend their appointment at 40 weeks (or over) must be contacted by telephone and advised to attend MFAU that day for review (if MGP- may reschedule within 24hrs). A record of this conversation will be documented in the medical notes.

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Related WNHS guidelines and resources

KEMH Clinical Guidelines Obstetrics & Gynaecology:

- Antepartum Care: Midwifery Care Flowchart; Antenatal Care Schedule: Subsequent Visits
- Fetal Surveillance: Fetal Heart Rate Monitoring
- Labour and Birth: Induction of Labour (available to WA Health staff via Healthpoint)

Australian Government Pregnancy Care Guidelines: Section 62: Prolonged Pregnancy

Patient Resources:

- KEMH Pregnancy, Birth and your Baby book (5.93MB) (section: Between 40 and 42 weeks: 'Management of prolonged pregnancy' and 'Induction of Labour')
- Department of Health WA: My baby is overdue- what now? (external website)

Keywords:	prolonged pregnancy, post term pregnancy, EDD, gestation, IOL, induction of labour, cervical assessment, induction of labour, 41, post dates, beyond term, antenatal visit		
Document owner:	Obstetrics & Gynaecology Directorate		
Author / Reviewer:	Head of Obstetrics		
Date first issued:	Nov 2019	Version:	1.1
Reviewed dates:	v1.1 Jan 2020 minor amendment p.6 wording	Next review date:	Nov 2022
Supersedes:	**Supersedes**: 1. Prolonged Pregnancy: Care Beyond 40 Weeks Gestation (v1.0 Nov 2019) **History**: In Nov 2019 (v1.0) amalgamated two individual guidelines on prolonged pregnancy dating from April 2002. 1. Pregnancy Beyond 41 Weeks: Management of (date last amended Aug 2016) 2. >41 Weeks Gestation: Midwifery Assessment (dated July 2015)		
Endorsed by:	Obstetrics & Gynaecology Directorate Management Committee [OOS approved with Medical and Midwifery Co directors]	Date:	25/11/2019
NSQHS Standards (v2) applicable:	1 Governance, 6 Communicating (incl), 8 Recognising & Responding to Acute Deterioration		