

South Australian Perinatal Practice Guideline

Prolonged Pregnancy

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Note:

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Explanation of the aboriginal artwork:

The Aboriginal artwork used symbolises the connection to country and the circle shape shows the strong relationships amongst families and the Aboriginal culture. The horse shoe shape design shown in front of the generic statement symbolises a woman and those enclosing a smaller horse shoe shape depicts a pregnant woman. The smaller horse shoe shape in this instance represents the unborn child. The artwork shown before the specific statements within the document symbolises a footprint and demonstrates the need to move forward together in unison.



Australian Aboriginal Culture is the oldest living culture in the world yet Aboriginal people continue to experience the poorest health outcomes when compared to non-Aboriginal Australians. In South Australia, Aboriginal women are 2-5 times more likely to die in childbirth and their babies are 2-3 times more likely to be of low birth weight. The accumulative effects of stress, low socio economic status, exposure to violence, historical trauma, culturally unsafe and discriminatory health services and health systems are all major contributors to the disparities in Aboriginal maternal and birthing outcomes. Despite these unacceptable statistics the birth of an Aboriginal baby is a celebration of life and an important cultural event bringing family together in celebration, obligation and responsibility. The diversity between Aboriginal cultures, language and practices differ greatly and so it is imperative that perinatal services prepare to respectively manage Aboriginal protocol and provide a culturally positive health care experience for Aboriginal people to ensure the best maternal, neonatal and child health outcomes.

Purpose and Scope of Perinatal Practice Guideline (PPG)

The purpose of this guideline is to assist clinicians in the management of prolonged pregnancy. It contains antenatal and intrapartum recommendations including accuracy of dating, identification of risk factors, antenatal and intrapartum surveillance and information for women.



Flowchart: Prolonged Pregnancy

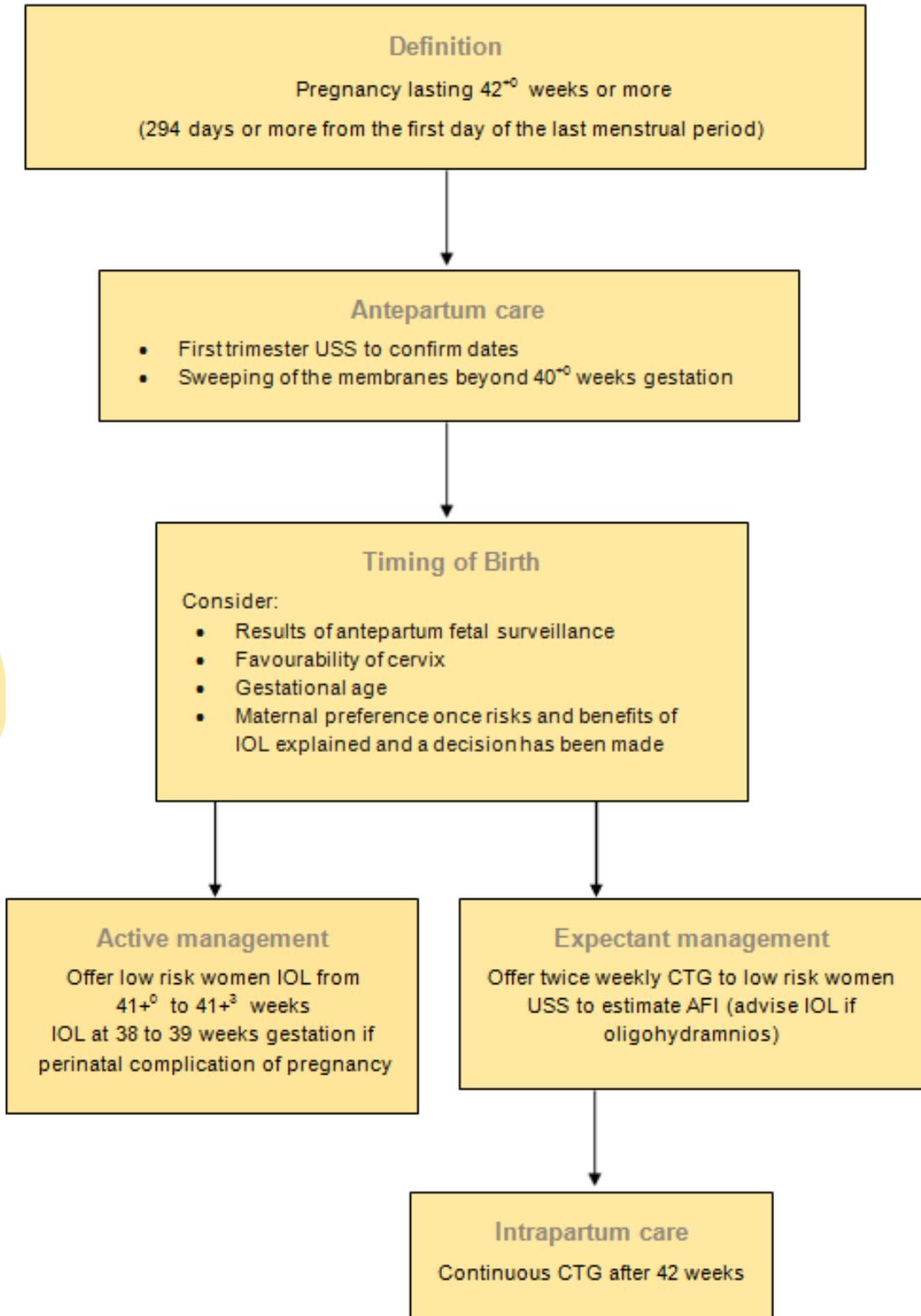


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Summary of Practice Recommendations

- First trimester USS (as part of first trimester screening), for all women to confirm dates
- Sweeping of the membranes beyond 40⁺⁰ weeks gestation
- Women of South Asian and black African origin may benefit from earlier fetal surveillance and planned induction of labour to prevent prolonged pregnancy
- Extending pregnancy beyond 42 weeks gestation is not recommended
- Low risk women should be counselled about the risks and benefits of induction of labour at 41⁺⁰ to 41⁺³ weeks gestation. Women’s choice should be respected.
- From 41⁺⁰ weeks gestation consider twice weekly CTGs and USS for assessment of AFI +/- Dopplers
- Oligohydramnios or evidence of fetal compromise are indications for induction of labour
- Continuous monitoring in labour is recommended at or beyond 42 weeks gestation



Abbreviations

AFI	Amniotic fluid index
BMI	Body mass index
CTG	Cardiotocograph
et al.	And others
IOL	Induction of labour
IUGR	Intrauterine growth restriction
LMP	Last menstrual period
mmol/L	Millimoles per litre
MSL	Meconium stained liquor
PE	Preeclampsia
RCOG	Royal College of Obstetricians and Gynaecologists
SOGC	Society of Obstetricians and Gynaecologists of Canada
USS	Ultrasound

Definitions

Prolonged pregnancy	Pregnancy lasting 42+ ⁰ weeks or more (294 days or more) from the first day of the last menstrual period (LMP) ¹
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Introduction

Prolonged pregnancy, post term, post-dates and post mature are all used to mean the same thing.

Incidence

- Depending on the accuracy of pregnancy dating approximately 5 to 10 % of pregnancies will reach 42+0 weeks^{2,3,4}
- The risk of perinatal death in South Australia increases from 1: 7,000 at 36 weeks to 1:350 at 42 + weeks^{1,3}
- Obesity, nulliparity and maternal age 30 years or more have been associated with a higher incidence of prolonged pregnancy^{1,3,5}

Low Risk Women

Compared with expectant management, IOL at 41⁺⁰ weeks reduces the caesarean section rate and is associated with less intrapartum fetal compromise, meconium-stained liquor (MSL), and macrosomia (> 4,000 g).^{1,6,7}

Low risk women should be offered induction of labour after 41⁺⁰ and by 41⁺³ weeks. Regular fetal surveillance should be offered to low risk women who choose expectant management.¹

High Risk Groups

Women with risk factors such as diabetes, hypertension, high BMI and advanced maternal age are not considered low risk and are not covered by this guideline.

Racial variation in perinatal mortality

Studies performed in the UK and the Netherlands suggest South Asian and black women of African origin have different rates of perinatal mortality at term, but no clear evidence exists to guide intervention in these women.^{9,10,11,12}



Adverse outcomes

Prolonged pregnancy is associated with increased:

Maternal

- Induction of labour (IOL) rates
- Operative birth
- Intrauterine infection
- Labour dystocia
- 3rd or 4th degree tears (related to macrosomia)

Neonatal

- Intrapartum fetal compromise
- Neonatal morbidity e.g. Meconium stained liquor (MSL), meconium aspiration syndrome, neonatal acidaemia, birth injury
- Macrosomia
- Perinatal mortality^{13,14}
- Asphyxia
- Early neonatal convulsions
- Congenital malformations⁷

Preventative measures

Primary

- Fetal biometry by ultrasound in the first trimester using crown rump length is the most accurate method of assessing gestational age⁵
- First trimester ultrasound as part of first trimester screening is recommended for all women and assists in dating the pregnancy
- Sweeping of membranes beyond 40⁺⁰ weeks of gestation (digital separation of the membranes from the wall of the cervix and lower uterine segment)¹⁵

Secondary

- From 41+0 weeks it may be reasonable to perform:
 - Twice weekly CTG for expectant management
 - Ultrasound (USS) to estimate maximum amniotic fluid index (< 5cm or deepest pool < 2cm indicates oligohydramnios).
- Oligohydramnios or evidence of fetal compromise is an indication for birth

Induction of labour

Medical expert consensus favours IOL around 38⁺⁰ to 39⁺⁰ weeks of gestation for women with significant perinatal complications of pregnancy. At term, low risk women should be counselled about the risks and benefits of an IOL at 41⁺⁰ to 41⁺³ weeks of gestation compared with expectant management (see [consumer advice](#)).

It is important that low risk women are given enough information to be able to choose between induction of labour and expectant management and that their choice is respected.

When determining timing of birth, consider:

- Favourability of the cervix
- Gestational age
- Maternal preference and risks if the woman chooses expectant management

If the woman chooses induction of labour for prolonged pregnancy, ensure the advance booking is made early to avoid problems with available spaces.

Continuous monitoring in labour if the gestational age from 42⁺⁰ weeks of gestation (294 days)



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Appendix: *Consumer Advice*Consumer Advice for decision making regarding the induction of labour expectant management at 41⁺⁰ weeks gestation**Risks and benefits**

- Most women will go into labour spontaneously by 42+0 weeks.
- Membrane sweeping makes spontaneous labour more likely¹⁵
- In cases where induction of labour is the preferred option, there is a small possibility that the induction may not be successful. Alternative options in this case include:
 - A further attempt to induce labour (the timing depending on the clinical situation and the woman's wishes)
 - Caesarean section
- Labour induction after 41⁺⁰ and by 41⁺³ weeks is associated with lower perinatal mortality and meconium stained liquor than expectant management with no increase in caesarean section rate¹
- Macrosomia and complications associated with macrosomia (prolonged labour, cephalopelvic disproportion and shoulder dystocia) occur more frequently beyond term.
- In South Australia, the risk of fetal death in singleton pregnancies increases with gestational age:
 - 0.44 per 1,000 live births at 40+0 weeks' gestation
 - 0.76 per 1,000 live births at 41+0 weeks' gestation
 - 1.38 per 1,000 live births at 42+0 weeks' gestation¹³

Recommendations

- It is recommended that women who choose expectant management have twice weekly cardiotocography and amniotic fluid index assessments
- Oligohydramnios or evidence of fetal compromise is an indication for birth
- Women with uncomplicated pregnancies should be offered induction of labour between 41⁺⁰ and 41⁺³ weeks to avoid the risks of prolonged pregnancy
- Waiting until 42⁺⁰ is not recommended
- Exact timing depends on the woman's preferences and local circumstances



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Write Group Lead

Allison Rogers

Write Group Members

A/Prof Rosalie Grivell
A/ Prof Ben Mol
Dr Brian Peat
Rebecca Smith

SAPPG Management Group Members

Sonia Angus
Dr Kris Bascomb
Lyn Bastian
Dr Elizabeth Beare
Elizabeth Bennett
Dr Feisal Chenia
John Coombas
Dr Vanessa Ellison
Jackie Kitschke
Dr Kritesh Kumar
Catherine Leggett
Dr Anupam Parange
Rebecca Smith
A/Prof Chris Wilkinson



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Developed by:	SA Maternal, Neonatal & Gynaecology Community of Practice
Contact:	HealthCYWHSPerinatalProtocol@sa.gov.au
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