

South Australian Perinatal Practice Guidelines

1st trimester medical and surgical termination of 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

Definition

Termination of pregnancy refers to a procedure, whether medical or surgical, that results in expulsion of the products of conception

In this guideline, first trimester termination of pregnancy refers to pregnancies ended before 12⁺⁶ weeks of gestation

Second trimester termination refers to pregnancies ended after 13⁺⁰ weeks of gestation

Literature review

It is estimated that approximately half of all pregnancies in Australia are unplanned

A large Australian survey¹ showed the following outcomes for women faced with an unplanned pregnancy:

- > Motherhood 56 %
- > Terminate pregnancy 29 %
- > Offer the baby for adoption: 2 %
- > Miscarriage 13 %

In South Australia, approximately 20 % of recorded pregnancies end in termination of pregnancy²

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cywhs.perinatalprotocol@health.sa.gov.au

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Medical termination of pregnancy

Background

Mifepristone is a progesterone antagonist which binds to progesterone and glucocorticoid receptors. By preventing the effects of progesterone in the uterus it interferes with implantation and placental development resulting in fetal demise. It also increases uterine sensitivity to prostaglandins and softens and dilates the cervix making its use in conjunction with misoprostol very effective (> 96 %) in bringing about termination in early pregnancy³

Misoprostol is a prostaglandin E-1 analogue which induces uterine contractions, cervical dilatation and ripening. It has been widely used overseas for pregnancy termination. When used alone without mifepristone in the first trimester it is reported to be > 83 % effective in expelling the products of conception from the uterus³

Misoprostol in the first trimester of pregnancy has been shown to double the risk of congenital malformations⁴. For this reason women should be informed of the importance of follow-up and in the rare event of ongoing pregnancy are recommended to undertake further abortion procedure when either medical or surgical abortion has failed

Mifepristone is TGA approved for use with misoprostol to terminate pregnancy up to 49 days (7 weeks) gestation. Its use up to 63 days (9 weeks) gestation remains off-label but is widely established as a safe alternative to surgical termination of pregnancy⁵

Indications

Women seeking termination of pregnancy who are less than 63 days (9 weeks) from the first day of their last menstrual period as confirmed by ultrasound assessment of gestation

Women need to have adequate support for the process and a support person to drive them home on the day of misoprostol administration and willing to take them to hospital or call an ambulance in the case of profuse bleeding necessitating urgent treatment

It is recommended that women have access to a 24 hour phone line in case advice is needed

Women need to agree to undertake the follow-up process (see below) to ensure all products of conception have been expelled

Contraindications to mifepristone / misoprostol

- > Bleeding conditions or concomitant administration of anticoagulants
- > Inherited porphyria
- > Adrenal failure
- > Chronic corticosteroid use (as mifepristone suppresses adrenal function for 3-4 days due to its competitive antagonism at glucocorticoid receptors)
- > Allergy to mifepristone and/or misoprostol
- > Intrauterine device in situ
- > Pelvic infection
- > Known or suspected ectopic pregnancy

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Assessment

Clinical history

- > Date of last menstrual period
- > Pregnancy test: type and timing
- > Course of the current pregnancy
- > Symptoms of pain and bleeding
- > History of previous pregnancies
- > Any medical conditions and allergies

Assess the woman on her own at some point in the consultation to establish that her request for a termination of pregnancy is not made under coercion especially by someone accompanying her

Provide contraception for use immediately after completion of termination of pregnancy. Fertility returns very quickly after medical termination of pregnancy. On average ovulation occurs on day 20 after mifepristone⁷, but can occur as soon as 8 days after mifepristone

Implanon, Depo Provera, progestogen only pill, or combined oral contraception should be initiated on the day of misoprostol administration. IUCD insertion should be booked for around 2 weeks afterwards to ensure complete expulsion of the products of conception before IUCD insertion

Investigations

Ultrasound to assess the site and gestation of the pregnancy

If no pregnancy is seen in the uterus, ectopic pregnancy needs to be considered.

Correlation with a quantitative β -HCG is recommended in this situation. An intrauterine sac should be visible at 5+ weeks gestation and/or with a β -HCG of >1,500 IU

Mifepristone administration should be delayed until an intrauterine sac is confirmed due to reduced efficacy of mifepristone and misoprostol before an intrauterine sac becomes visible on ultrasound. The continuing pregnancy rate before a sac is seen is 7.5 % compared with 0.6 % once an intrauterine sac has been identified on ultrasound⁵

Venous blood – for quantitative β -HCG, Blood Group, Rh status, Haemoglobin

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Management

Written consent is obtained from the woman after full explanation of possible risks

Mifepristone 200 mg orally is administered

The woman is discharged with an oral anti-emetic in case of nausea / vomiting. She is asked to return to the hospital / clinic for a further dose if she vomits within 2 hours of mifepristone ingestion. For women who are already very nauseous 4 to 8 mg ondansetron or 10 mg metoclopramide can be given to reduce the chance of vomiting

After 24 to 48 hours the woman returns to the hospital / clinic having pre-medicated herself with 4 to 8 mg ondansetron or 10 mg oral metoclopramide and 400 mg oral ibuprofen

A dose of 4 x 200 micrograms misoprostol is given buccally or sublingually

Misoprostol usually acts quickly and the women can expect to pass products of conception within the next few hours, but bleeding usually continues for several weeks

An oral analgesic such as Paracetamol 500 mg / codeine phosphate 30 mg is given for analgesia

Anti D 250 IU is administered to women who are Rh negative

The woman is discharged home to continue using regular oral analgesia with paracetamol or oral / rectal NSAIDs e.g. diclofenac, ibuprofen

The woman is asked to self-administer 200 micrograms misoprostol buccally at home every 8 hours for 2 days

Written information must be provided to the woman. She should be advised not to use tampons and to abstain from intercourse for 7 days to reduce the risk of infection. In the case of very heavy bleeding (usually on the day of the misoprostol administration) she is advised to present to an emergency service. Urgent dilatation and curettage may be required

The woman is advised that, if she is still bleeding as much or more than the normal first day of her period seven days after using misoprostol, she should contact the doctor / hospital for review. This is generally an indication that there are retained products of conception. Check by ultrasound, if there is doubt

Follow-up

Follow up is recommended to ensure that the pregnancy is not ongoing. Symptoms of retained products of conception and infection should also be reviewed and treated accordingly

The following indicate that the pregnancy has been successfully terminated:

1. Pregnancy symptoms subside (i.e. nausea)
2. The next menstrual period is expected within 5 weeks. This may be absent where Implanon or Depo Provera is used
3. Falling β -HCG levels. Quantitative β -HCG level between day 10 and 20 can be compared to the initial value. A pathology order form for quantitative β -HCG level can be given at the woman's initial consultation with verbal request to attend a community collection centre 10-20 days later
4. A negative urine β -HCG test. It may take some time after the termination procedure before levels fall below 15-25 IU (the usual level at which a urine test is positive). Urine pregnancy tests may remain positive for at least 4 weeks after termination of pregnancy

The β -HCG values correlate poorly with retained products of conception. Clinical assessment of symptoms and signs is recommended to assess for retained products of conception +/- ultrasound

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Management of complications

Haemorrhage

Is a complication occurring in about 0.1 %⁵. It needs ready access to dilatation and curettage facilities. Less heavy but persistent bleeding is better managed with further home medication with oral misoprostol and avoidance of surgery where possible

Ongoing pregnancy

Continuing symptoms of pregnancy or a rising β -HCG suggest a continuing pregnancy. This should be confirmed with ultrasound (to exclude molar pregnancy) before commencing any further procedures to terminate the pregnancy

Surgical management with suction curette if > 9 weeks gestation. If < 9 weeks gestation repeat doses of mifepristone and misoprostol could be an alternative option

Retained products of conception

Management depends on the amount of bleeding, symptoms / signs of infection and the woman's preference:

Either medical management with further misoprostol (800 micrograms stat buccally followed by 400 micrograms buccally every 8 hours for 2 days) or surgical management with dilatation and curettage

Infection

Severe infections after medical termination are rare. In Australia there has been one reported case of death (less than 0.01 % prevalence) from Group A Streptococcal sepsis in a woman 9 days after medical termination. Despite fever and flu-like symptoms she had not sought medical help⁵

Overseas, there have been reported cases of *Clostridium sordellii* and *Clostridium perfringens* infections leading to death with a rate in the United States of 0.58 per 100,000 medical terminations⁹

Medical practitioners assessing a woman after medical termination should, therefore, be alert to the rare possibility of severe infection. In the case of sepsis inpatient management with appropriate IV antibiotics is recommended

Routine antibiotic prophylaxis is not indicated but could be considered for women deemed to be at high risk of infection

Less severe infection still remains uncommon with a rate of suspected or proven infection of 0.2 %^{5,6}. Infection is often related to retained products of conception and assessment and treatment for this is also recommended concurrently

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Surgical termination of pregnancy

Indications

Women seeking termination of pregnancy at a gestational age of 12 weeks or less. The alternative is medical termination with mifepristone / misoprostol if < 9 weeks

Vacuum aspiration involves evacuation of the uterus under local or general anaesthesia and has well proven success and safety record

The woman should be informed that she will not be able to drive or drink alcohol for 24 hours after the procedure. Arrangements will need to be made in advance for her transport home after discharge

Assessment

Clinical history:

- > Date of last menstrual period
- > Pregnancy test: type and timing
- > Course of the current pregnancy
- > Any symptoms of pain and bleeding
- > History of previous pregnancies and gynaecological surgery in particular LSCS, LLETZ, cone biopsy or known variation in uterine anatomy such as bicornuate uterus
- > Medical conditions and allergies

Assess the woman on her own at some point in the consultation to establish that her request for a termination of pregnancy is not made under coercion especially by someone accompanying her

Investigations

Ultrasound to assess the site and gestation of the pregnancy

If no pregnancy is seen in the uterus, ectopic pregnancy needs to be considered.

Correlation with a quantitative β -HCG is recommended in this situation. An intrauterine sac should be visible at 5+ weeks gestation and/or with a β -HCG of >1,500 IU

An intrauterine pregnancy should be confirmed before suction aspiration. If a fetal pole is not yet visible termination should be postponed until a fetal pole can be identified. If there is any doubt at the time of surgery, products of conception may need to be sent for histopathology or follow up with β -HCG instituted

Blood Group, Rh status

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Management

Written consent is obtained from the woman after full explanation and understanding of the possible risks of the procedure

Provision of contraception for use after termination of pregnancy is completed. Implanon or IUCD can be inserted at the time of the surgical termination of pregnancy

The risk of expulsion of an IUCD increases with increasing gestational age at the time of termination (due to greater cervical dilatation) but there are no other increased risks.

Therefore, it is not necessary to avoid insertion given that it is an opportune time to insert efficacious long-acting contraception¹¹

Screening for Chlamydia should be undertaken before insertion of an IUCD

Preoperative preparation

Fast from food for six hours (clear fluids 2 hours) before the procedure

Administer pre-operative misoprostol for cervical preparation

Cervical preparation reduces the need for mechanical cervical dilatation⁸ as well as reducing the risk of an incomplete evacuation¹⁰

Dose of misoprostol is dependent on gestational age

Ideally, women can take misoprostol at home orally 3 hours before the procedure or, if they come for consultation and surgery on the same day, misoprostol can be given sublingually allowing at least 30 minutes for its effect

Women should have made a clear decision before taking misoprostol. In the event of abortion not proceeding or a continuing pregnancy it is important to note misoprostol in the first trimester of pregnancy has been shown to double the risk of congenital malformations⁴. For this reason women should be informed of the importance of follow-up and in the rare event of ongoing pregnancy are recommended to undertake further procedure for termination when either medical or surgical termination of pregnancy has failed

Anti-emetics are given to women who need more than two doses of misoprostol because of the increased incidence of vomiting

Table 1: 1st trimester surgical abortion cervical priming doses:

GESTATION	RECOMMENDED PRE-MEDICATION
5-9 weeks	Misoprostol 200 micrograms orally 3 hours before surgery
10 weeks	Misoprostol 200 micrograms orally 3 hours before surgery AND Misoprostol 200 micrograms orally at least 30 minutes before surgery
11 weeks	Misoprostol 200 micrograms orally 3 hours before surgery AND Misoprostol 400 micrograms orally after 30 minutes (at least 30 minutes before surgery)
12 weeks	Misoprostol 200 micrograms orally 3 hours before surgery THEN Misoprostol 400 micrograms orally after 30 minutes THEN misoprostol 400 micrograms after another 30 minutes (at least 30 minutes before surgery)

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Procedure

Abdominal or transvaginal ultrasound (or bimanual examination if ultrasound is not available) is used to confirm gestation. Uterine position is also assessed

The woman is prepared in the lithotomy position

Betadine or chlorhexadine solution to the pubic area, vulva, perineum and vagina

Drape with sterile sheet

Insert Sims speculum to expose cervix

Two volsellum forceps are applied to the anterior lip of the cervix to control the position of the cervix

Inject cervical local anaesthetic:

- > Inject just lateral to the cervical os at each side (3 o'clock and 9 o'clock positions) with half the local anaesthetic at each site. An appropriate dose (a total of 7 mL at < 8 weeks gestation and 14 mL at ≥ 8 weeks gestation) of lignocaine 2 % with adrenaline 1:200,000 should be given to achieve cervical anaesthesia
- > The maximum safe dose of 7 mg / kg will not be exceeded
- > Adrenaline should be omitted when gestation is less than 6 weeks due to the risk of prolonged uterine artery vasospasm

Dilate cervix with Hegar or Hawkin / Ambler dilators to a size appropriate for gestation and parity. See table 2 below:

Table 2

Gestation in weeks	Dilatation in millimetres
6 and less	6
7	7
8	8
9	9
10	10
11	11
12	12

Choose appropriate suction curette and attach to the tubing. Either flexible or rigid suction catheters are used. Insert into the uterus up to the fundus with the suction hole open. Then, apply suction and move the curette with a circular motion while slowly withdrawing it until the uterus is empty. Curved rigid suction curettes are useful for accessing cornual angles and the fundus of acutely flexed uterine bodies

Check with transvaginal ultrasound that no pregnancy sac or retained products of conception remain

Administer misoprostol 200 micrograms into the posterior fornix of the vagina.

Indomethacin 100 mg can be inserted per rectum for analgesia

Check swab count is correct

Anti D 250 IU is administered to women who are Rh negative

There is no benefit from prophylactic administration of oxytocin or ergometrine in the first trimester

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Post-operative management

Record baseline temperature, pulse, blood pressure and vaginal blood loss on return from theatre

Repeat temperature, pulse, blood pressure and vaginal loss after one hour or sooner if indicated

Offer a light meal and fluids when fully awake

Discharge criteria

- > Vital signs stable for at least one hour
- > Ensure the woman is orientated to time, place and relevant people
- > Adequate pain control with oral analgesics
- > Minimal nausea, vomiting or dizziness
- > Minimal bleeding
- > Has passed urine
- > Has a responsible adult to take her home

Instructions should be given to the woman to return to an emergency service should she have large vaginal blood loss or develop symptoms of infection such as fever, sweating, rigors, myalgia, vaginal discharge or escalating abdominal pain

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Useful guidelines:

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The Care of Women Requesting Induced Abortion. Evidence-based Clinical Guideline Number 7, 2011.

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World Health Organisation. Safe Abortion: Technical and policy Guidance for Health Systems. 2003.

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Abbreviations

COCP	Combined oral contraceptive pill
D & C	Dilatation and curettage
g	Gram(s)
Hb	Haemoglobin
IU	International units
IV	Intravenous
kg	Kilogram(s)
LLETZ	Large loop excision of the transformation zone
LMP	Last menstrual period
LSCS	Lower segment caesarean section
mcg	Microgram(s)
mg	Milligram(s)
mL	Millilitre(s)
NSAIDs	Non-steroidal anti-inflammatory drugs
Quant β -HCG	Quantitative Beta-HCG
Rh	Rhesus
S/L	Sublingual
STOP	Surgical Termination of Pregnancy
TGA	Therapeutic Goods Administration
TOP	Termination of Pregnancy

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