Medical termination of pregnancy

The role of the GP

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With the PBS listing of medications for medical termination of pregnancy, there are likely to be increasing numbers of women requesting access to GP-led medical abortion care. GPs should be aware of the options for the management of an unintended pregnancy and possible post-termination complications and follow-up care.

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In many countries, management of an unintended pregnancy is incorporated into primary health care. In Australia, GPs have often been bypassed in this process because most pregnancy terminations take place in private clinics where a referral is not required. However, with the PBS listing of medications for the medical termination of pregnancy (MTOP), GPs may see an increase in the number of women requesting access to GP-led management of an unintended pregnancy or post-termination follow up.

In most states of Australia, nonprocedural GPs are able to provide MTOP after completion of online training through the MS-2 Step program (www.ms2step.com.au). The benefits of GP involvement in the provision of MTOP services are significant and include counselling and post-termination contraception advice. Some example case scenarios are given in Boxes 1 and 2. Key steps in an MTOP consultation are outlined in Box 3.

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Pre-termination counselling

For most women, the decision to terminate a pregnancy does not require intensive counselling; many have come to a decision themselves before seeing a healthcare professional.[1] However, some women experiencing an unintended pregnancy may require significant emotional support and counselling. The involvement of a GP is important because they are well placed to discuss available options, to facilitate referral to an appropriate social worker or psychologist if required, provide information on the steps involved in continuing with antenatal care or adoption, or the process of terminating the pregnancy by medical or surgical means.

There are several excellent resources available to GPs to assist with counselling a woman with an unintended pregnancy, including Children by Choice (www.childrenbychoice.org.au) and the Pregnancy Options booklet from Family Planning NSW (www.fpnsw.org.au). Training in nondirective pregnancy counselling is available online through RACGP GP learning (www.racgp.org.au/education/courses/activitylist/activity/?id=56276).

Process for the provision of medical termination of pregnancy

Medical termination is a two-step process performed for women with a pregnancy of up to 63 days' (nine weeks') gestation using one tablet of mifepristone 200 mg orally, followed 36 to 48 hours later by four 200 mcg tablets of misoprostol:

- Mifepristone is a synthetic steroid. It is a competitive

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progesterone receptor antagonist blocking the effects of progesterone thereby destabilising a pregnancy and making the myometrium more sensitive to prostaglandins that induce uterine contractions.
- Misoprostol is a synthetic prostaglandin E1 analogue. It induces contractions in the smooth muscles of the myometrium and stimulates the cervix to relax, leading to the evacuation of the uterine contents. It is considered teratogenic because it has been associated with fetal limb abnormalities.[2,3]

The buccal route of administration of misoprostol has been shown to be more effective than oral dosing, especially for a pregnancy with a gestational age of more than 49 days.[4]

Used buccally, the average time for commencement of contractions is 40 minutes; sustained contractions last about 90 minutes and the peak activity is contained within five hours after administration.

Contraindications

It is important to exclude the following contraindications to MTOP:
- allergy to mifepristone, misoprostol, prostaglandin or pharmaceutical constituents
- current ectopic pregnancy or pregnancy of unknown location
- pregnancy with a gestational age of more than 63 days
- intrauterine device (IUD) in situ (the IUD must be removed before the MTOP)
- severe uncontrolled asthma
- significant bleeding risk due to an inherited disorder or anticoagulant therapy
- chronic adrenal failure, including iatrogenic adrenal failure from long-term current corticosteroid therapy
- inherited porphyria.

Caution is recommended in women older than 35 years of age who smoke 15 or more cigarettes daily (these women were generally excluded from clinical trials).

1. CASE SCENARIO 1: UNINTENDED PREGNANCY WHILE BREASTFEEDING

Melinda is a 38-year-old long-time patient of your practice. You have participated in antenatal shared care in both her pregnancies. Melinda is breastfeeding her six-month-old son and using the withdrawal method for contraception. She has only had one menstrual period since the birth of her son. She developed breast tenderness and mild nausea and a home pregnancy test is positive.

Melinda has no desire for further pregnancies and says her family is complete. It took a long time for her to conceive her children so she had not been concerned about effective contraception. Melinda is shocked and very emotional but is clear that she does not want to continue the pregnancy. She has no bleeding or pain, no significant past medical history and is taking no regular medications.

An ultrasound dates the pregnancy at five weeks and her blood group is known to be rhesus negative from her previous pregnancies.

Melinda is advised about the options for medical and surgical termination of pregnancy. She is interested in knowing more about medical termination. After further discussion of the medications, the process and side effects, including advice regarding breastfeeding during medical abortion (www.sps.nhs.uk/articles/can-mothers-breastfeed-after-a-medical-termination-of-pregnancy), Melinda says she would like to proceed with a medical termination. The printed patient information sheet from MS-2Step is given to her. After the risks are discussed, including ongoing pregnancy, incomplete termination requiring surgical management, bleeding and infection, the consent form is signed.

Melinda is given the PBS authority prescription and you call the local pharmacy to check they have stock.

Rhesus(D) immunoglobulin (anti-D) is discussed and a 250 IU intramuscular injection is given from the clinic stock.

Melinda is advised of the 24-hour MS Health telephone aftercare number and told to attend her local emergency department if she has any serious concerns.

A follow-up appointment is made for two weeks and it is planned that she will have a hormonal intrauterine device (IUD) inserted at that appointment. She agrees to abstain from sexual intercourse until the appointment. Melinda has a blood test for measurement of quantitative beta-human chorionic gonadotrophin (hCG) level two days before the follow-up appointment to confirm the medical termination is complete.

At the follow-up appointment, Melinda reports that the bleeding stopped after one week. The laboratory reports a quantitative beta-hCG level less than 5 U/L. An IUD is inserted uneventfully. Melinda states that she is quite teary and says she has felt very 'up and down' since the medical termination. She is offered a psychology referral but prefers to just give it some time and says she has good support from her husband.

At her postinsertion IUD check three weeks later, there are no concerns and Melinda's mood is much improved.

Breastfeeding and MTOP

The manufacturer of MS-2 Step does not recommend its use in women who are breastfeeding. However, recently updated UK Medicines Information suggests that breastfeeding does not need to be interrupted with mifepristone or misoprostol use, but that breastfeeding infants should be monitored for gastrointestinal symptoms.[1,5,6]

Initial assessment

Accurate dating of the pregnancy is crucial because MS-2 Step for medical abortion is only licensed in Australia for a pregnancy of up to 63 days' gestation. Ultrasound dating is generally recommended, which also has the important benefit of confirming the intrauterine location of the gestational sac. The possibility of an ectopic pregnancy should always be considered. Importantly, mifepristone and misoprostol are not indicated for the management of ectopic pregnancy and referral

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2. CASE SCENARIO 2: MEDICAL TERMINATION OF PREGNANCY FOLLOWED BY INSERTION OF A CONTRACEPTIVE IMPLANT

Chayna is a 23-year-old woman who has been on the combined hormonal contraceptive pill but 'ran out a few months ago and was waiting until pay day to get a new script filled'.

The date of her last menstrual period is uncertain; a home pregnancy test is positive.

Chayna is certain she does not want to continue with the pregnancy because she has no stable income or support. She wants to have a medical termination as she has had a surgical termination last year and feels sick after the sedation. She has also heard that a medical termination is less expensive (she is several hundred dollars out of pocket for the surgical termination).

Investigations are arranged and the results are as follow:

- ultrasound confirms intrauterine gestation 8+3
- haemoglobin 130 g/L
- beta-human chorionic gonadotrophin (hCG) level of 32346 U/L
- blood group O rhesus-positive
- self-collected low vaginal swab is positive for chlamydia.

Chayna plans to go to her friend's house when she takes the second medication (misoprostol) as her friend has had a medical termination previously and offered to be her support person.

The process is discussed in detail including planning exact timing of taking the medications so she can try to arrange the bleeding to occur at a time most suitable to her and her friend. She is clear that she must take the first medication before she is nine weeks pregnant. Expected course of events, side effects of medications and pain relief are all discussed and prescriptions and written information provided. Informed consent is documented.

Chayna is keen to have a contraceptive implant inserted and she is advised it could be inserted on that day but she prefers to wait until after the termination. Consequently, she is given information and a prescription for the contraceptive implant to bring with her and a form to get a repeat quantitative beta-hCG blood test the day before her follow-up appointment in 10 days. She is reminded that women can ovulate and fall pregnant quickly after a medical termination, and so she is advised to abstain from sexual intercourse until seven days after the implant is inserted

Chayna is advised of her positive chlamydia result and given a prescription for azithromycin 1 g stat and is encouraged to contact her sexual partners from the past three months using the Let Them Know website (http://letthemknow.org.au).

Chayna phones a few days later saying that she has not had much bleeding despite following all the instructions she is given. She is concerned. A prescription (non-PBS) for a second transbuccal dose of misoprostol 800 mcg (four 200 mcg tablets) is faxed to a local pharmacy and Chayna is advised to take these as soon as possible with the same requirement for pain relief and a support person as previously. The next day, by telephone, it is confirmed that Chayna has significant bleeding and cramping after the second dose of misoprostol and she is still bleeding, but it appears to be slowing down. She feels well and has no symptoms to suggest infection.

The follow-up beta-hCG measurement at 10 days is 397 U/L and her bleeding continues 'like a light period'. She has brought along the contraceptive implant, which is inserted, and she is warned that the implant itself could cause some erratic bleeding. She is advised about the signs and symptoms that could suggest retained products or infection and she is encouraged to have a low threshold for seeking medical review if she is concerned.

Three weeks later Chayna presents worried. She is still having vaginal bleeding, which is lighter, but has become heavier again in the past two days. She is afebrile and feels well. Urine beta-hCG is negative and she has not had sexual intercourse since the medical termination. Pelvic ultrasound is arranged which shows an empty uterus. She is reassured that the bleeding is likely due to the contraceptive implant and that if it does not settle over the next few months to present for review. She is offered tranexamic acid for five days to help shorten this bleeding episode.

for urgent specialist care is required.

Quantitative measurement of beta-human chorionic gonadotrophin (hCG) levels is performed initially to correlate with ultrasound findings and is often repeated to confirm a successful MTOP. A high beta-hCG level with no intrauterine fetal pole on ultrasound would raise concern of an ectopic pregnancy and should be discussed with a specialist. Repeat measurement of quantitative beta-hCG level showing a decrease of more than 80% at seven to 10 days after taking mifepristone suggests the termination process has been completed. Initial assessment of haemoglobin is also recommended to detect anaemia because this may make MTOP unsafe.

As with any pregnancy, establishing the rhesus status of the woman is important. MTOP is considered a potentially sensitising event and all rhesus (Rh)-negative women should be offered Rh(D) immunoglobulin (anti-D) to prevent the possibility of haemolytic disease of the newborn in subsequent pregnancies.

Anti-D is a pooled human blood product and the Australian Red Cross Blood Service controls stock in Australia. GPs can request to become an approved health provider and order a small supply to have on hand to administer to appropriate Rh-negative women at the time of prescribing medications for MTOP. The Australian Red Cross Blood Service has an excellent website with useful resources, such as information brochures for women on anti-D and consent and refusal forms (https://transfusion.com.au/resource).

Legislation and consent

At the initial visit there is a substantial amount of information that needs to be discussed, and the involvement of a practice nurse can be an effective model of care. The prescribing doctor must assess the patient and ensure she meets the legal requirement for MTOP in the state or territory in which she resides. Further helpful information regarding abortion legislation can be found on the Children by Choice

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website (www.childrenbychoice.org.au/factsandfigures/australianabortionlawandpractice).

The possibility of an incomplete or unsuccessful termination must be discussed, as well as the risks of heavy bleeding and infection. Although most women who choose an MTOP wish to avoid a surgical procedure they must understand that in a small number of cases a subsequent surgical intervention is required to manage heavy bleeding or an ongoing pregnancy. A signed record of informed consent should be kept in the patient's file (Box 4).

It is also important that written instructions are provided regarding how and when to take the medications, the expected course of events and when to seek medical support (Box 5). A consent form and patient information brochure for GPs to use are accessible on the MS-2 Step website.

Prescribing the medications

The medications for MTOP are available as 'MS-2 Step composite pack', available on PBS Authority prescription when the prescribing GP has completed online training and is registered with the MS-2 Step program. The dispensing pharmacy must also be registered as an authorised dispenser of MS-2 Step.

Patients should receive clear, written instructions on managing expected pain and bleeding. It is recommended to take ibuprofen (or another NSAID) at least 20 minutes before taking the misoprostol (step 2 medication) and a paracetamol/codeine combination medication should be prescribed as this is usually required. Prescription for an antiemetic, such as metoclopramide or ondansetron, is also advisable in case significant nausea or vomiting is experienced as a side effect of the misoprostol. It is important not to understate the expected pain and other effects of the medications so that women can be well prepared to manage these at home.

To decrease the risk of infection, advice should be given to not use tampons or go swimming, and to avoid sexual intercourse for seven days after bleeding starts.

Cost

Financial issues can be a barrier for many women accessing termination of pregnancy, and the costs involved vary widely from clinic to clinic. For GPs providing MTOP services it is useful to list their MTOP consultation fees on the practice website or have the receptionist provide these to the patient at the time of booking.

There is currently no Medicare item number for the provision of MTOP services and so a timed consultation item number is appropriate. If the woman holds a Medicare card, the MS-2 Step medications are covered on the PBS as a single prescription.

Assistance and support

It is important for the patient to understand that a medical abortion takes place in her own home so the presence of a responsible support person is important in case she experiences more bleeding or pain than expected. Patients should be advised to have someone else available to care for young children. MTOP is not recommended in women with restricted access to emergency care due to travel or remote location in the two weeks following mifepristone administration in case of complications.

MS Health provides a 24-hour nurse aftercare helpline (1300 515 883) and all patients should be given this number to contact if they have any questions or concerns in case the prescribing GP is not available. Occasionally patients may need to seek medical care from an emergency department or after-hours medical service during the MTOP process. As this is a relatively new area of practice in Australia, it can be helpful if the patient has printed information about the process to show to medical staff.

Post-termination follow up

Follow up must occur to confirm that the MTOP process has been completed. The MS-2 Step composite pack medication comes with a 'black box warning' for medical review within 14 to 21 days. There are several recognised ways to confirm

3. KEY STEPS IN A MEDICAL TERMINATION OF PREGNANCY (MTOP) CONSULTATION

- Establish whether pregnancy is less than 63 days' gestation – ultrasound for dating and confirmation of intrauterine location of pregnancy is advisable
- Confirm the patient meets the legal requirement for an MTOP
- Review past medical history, including allergies and current medications
- Psychosocial screening to assess for any mental health or domestic violence issues which may need to be addressed as part of overall patient care
- Blood tests:
  - full blood count and baseline haemoglobin level
  - blood group and antibodies
  - baseline quantitative serum beta-human chorionic gonadotrophin (hCG)
- Sexually transmitted infection screening (if indicated)
- Discuss side effects, possible risks of the medications and obtain informed consent (Box 4)
- Assess access to medical care in the event of complications
- Address ongoing contraception needs
- Provide PBS authority prescription for MS-2 Step composite pack; written instructions should be printed and given to the patient (available on MS-2 Step website)
- Discussion of management of possible side effects, including nausea and pain relief strategies, heat pack and analgesia
- Emergency action plan
- Provide pathology request form for follow-up quantitative serum beta-hCG measurement one to two weeks after taking the mifepristone and put in recall system
- Obtain consent to follow-up contact at two to three weeks (either telephone call or surgery consultation); obtaining alternative contact person details is also recommended

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4. INFORMED CONSENT FOR MTOP

The informed consent process should be performed by the prescribing GP. Patients should be counselled on the risks associated with medical termination of pregnancy (MTOP) including:

- bleeding: 1 to 2% chance of requiring surgical procedure, 0.1 to 0.2% chance of blood transfusion
- incomplete or ongoing pregnancy requiring surgical procedure: 2 to 7%
- risk of fetal malformation if the pregnancy is continued after the medications are taken
- small risk of serious infection
- risk of missed ectopic pregnancy (if intrauterine pregnancy is not confirmed on an ultrasound prior to MTOP)

5. EXPECTED MEDICAL TERMINATION OF PREGNANCY PROCESS

Bleeding

- Usual onset within three to four hours of taking the misoprostol
- Heavier than a usual period for two to three days (clots not uncommon)
- Average length of bleeding is 10 to 16 days
- Sometimes light bleeding continues until next period
- Problem bleeding requiring medical review includes soaking more than one pad per hour for more than two hours or needing to change pads hourly on the second day of bleeding after taking the medications

Pain

- Ranges from moderate cramping to severe pain, generally worse than usual period pain
- Subsides once pregnancy is expelled, usually in less than 24 hours

Common side effects of medications

- Nausea
- Vomiting
- Fever and/or chills
- Rash
- Itching

completion of an MTOP:

- clinical history of expulsion of products of conception followed by a resolution of bleeding and pregnancy symptoms
- a follow-up ultrasound showing an empty uterus
- a decreased quantitative beta-hCG level of more than 80% from seven days after the mifepristone.

The method of confirmation of completion and follow up must be agreed and documented in the patient file at the time of prescribing. Many prescribers use a quantitative beta-hCG test for follow-up assessment.

Women may experience a range of emotions following an MTOP including grief, sadness, anger, relief and guilt. However, there is no good evidence to show that women experience long-term adverse mental health outcomes following a pregnancy termination.[7]

Patients should be advised that fertility returns rapidly after termination of an unintended pregnancy. Ovulation has been documented as early as eight days post-MTOP, so discussion and provision of contraception is important at the time of providing MS-2 Step.[8] Oral contraception should be commenced within five days of taking misoprostol and will be effective immediately. A contraceptive implant can be inserted on the day of the initial visit, before the MTOP medications have been taken, or after the process is complete. It will be effective immediately if inserted within five days of misoprostol administration. IUD insertion should be performed when there has been confirmation of complete termination of pregnancy; generally two to three weeks post-MTOP is appropriate.[9]

Conclusion

With the PBS listing of medications for MTOP, there are likely to be increasing numbers of women requesting access to GP-led medical abortion care. GPs may choose to undertake training to become providers of medical abortion. All GPs should be aware of the options for the management of an unintended pregnancy and possible post-termination complications and follow-up care. In the general practice setting, teamwork is the key to providing safe and successful MTOP outcomes for patients. The multidisciplinary team can include the GP, practice reception staff, practice nurse and local pharmacist, and nonroutine/emergency care providers such as the local public hospital emergency department or early pregnancy assessment clinic, private gynaecologist or local surgical termination provider. MT

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