



*Management of Side Effects and Complications in Medical Abortion:*

*A Guide for Triage and On-Call Staff*

Managing daytime and after-hours calls from medical abortion patients is an important component of the successful delivery of this service. While triage can be handled by a variety of staff members, a clinician must be available 24 hours a day, 7 days a week to answer urgent questions, determine the need for further evaluation, and provide or refer for treatment, including aspiration curettage, if needed.<sup>1</sup> Medical abortion services do not necessarily involve more calls to the provider than do surgical abortion services. In one study, about two thirds of providers reported receiving either fewer calls from medical abortion patients than from women undergoing surgical abortion or the same number of calls.<sup>2</sup> A prospective, randomized trial comparing medical abortion with methotrexate/misoprostol and surgical abortion found no difference in phone call time for the two methods.<sup>3</sup> Some medical abortion providers, however, have reported more follow-up calls associated with medical abortion compared with surgical abortion. As a general guiding principle, patients who are adequately prepared regarding what to expect are less likely to make calls for reassurance or clarification during the medical abortion than those who are not as well prepared.

**Management of Bleeding**

Episodes of heavy bleeding are common during medical abortion, and bleeding complaints will probably constitute the greatest proportion of triage and management tasks for clinical staff involved in these services.<sup>4</sup> Staff assigned to daytime telephone triage and after-hours call must be very familiar with the range of the medical abortion process, how to assess for deviations from normal, and when to intervene.

Established clinical policies which guide the decision-making process may be a helpful adjunct to risk management.

### **What Is Normal Bleeding After a Medical Abortion?**

As with a spontaneous abortion, the amount of bleeding may vary from approximately the amount associated with a normal menses to very heavy. Many women experience some bleeding after taking mifepristone but before using misoprostol. However, the vast majority of women, even if they have had bleeding, will need to use misoprostol as scheduled to complete the abortion. After administration of misoprostol, bleeding usually starts from 1/2 hour to 10 hours later (with the average being 2-4 hours), and in most studies has a median duration of 10-18 days after mifepristone.<sup>5</sup> As a general rule, most patients will initially experience moderate to heavy bleeding, with clots ranging in size from small to very large (small=dime; large=lemon; very large=orange) during the abortion. The heaviest bleeding may last for 1 to 4 hours as the pregnancy is being expelled. In a few cases, heavy bleeding may be delayed for a few days up to several weeks after misoprostol. Importantly, some women may experience a second episode of bleeding a few weeks after initiation of the regimen, as they complete the medical abortion process. Studies utilizing protocols with vaginal misoprostol have documented that, while bleeding requiring aspiration curettage occurs infrequently, the majority of these interventions take place between 2 and 5 weeks after the initiation of treatment.<sup>6, 7</sup>

Patients may have bleeding and expel the pregnancy while on the toilet. Moderate to large amounts of bright red blood appear even larger when diluted in water. This may be alarming to patients; it may also make assessment more difficult for the clinician.

## Evaluating Bleeding Complaints

When assessing bleeding, it is important to identify:

- A. If someone is with the patient;
- B. How far away is the patient from the clinic or local Emergency Department and how would she get there;
- C. The patient's emotional status;
- D. The emotional status of patient's support person(s);
- E. When the patient used misoprostol and when bleeding started;
- F. Amount of bleeding in relation to patient's normal menses and the number and type of pads soaked (wringing wet) in what period of time (for example, soaking one maxi-pad per hour for three hours);
- G. Any change in bleeding since it started;
- H. The presence and size of clots;
- I. Cramping or pain;
- J. The presence of pregnancy tissue;
- K. The presence of other symptoms that might suggest excessive blood loss (hypovolemia), such as lightheadedness, dizziness, weakness, fatigue, or rapid heart rate (tachycardia).
- L. What medications the patient has taken before and since bleeding started (review all prescription, over-the-counter and herbal and home remedies).<sup>8</sup>

**NOTE:** Ask patients about the use of herbs or other naturopathic components. Some of these, such as feverfew, garlic, ginger, ginkgo biloba, have anticoagulant properties or have been associated with bleeding.

## Managing Patients Who Call Complaining of Heavy or Prolonged Bleeding

Bleeding generally stops or slows substantially within 1 to 2 hours of passing the pregnancy. As a general rule, patients who have been bleeding heavily ( $\geq 2$  pads per hour) for less than 2 hours may safely be reassured that the bleeding should slow shortly, although it is prudent to recontact the patient to confirm

this. If the patient sounds as if she is comfortable and coping well but the person with her is still concerned, offer reassurance to that person as well.

The patient should be advised to:

- A. Rest;
- B. Use a heating pad or hot water bottle;
- C. Take an NSAID (non-aspirin), or if available a mild oral narcotic, for pain, if necessary;
- D. Drink plenty of non-alcoholic, caffeine-free beverages (e.g. water or juice) to prevent dehydration, and rise from a resting position slowly;

The provider and patient should make arrangements to talk again in approximately the next 1-2 hours to assess the patient's condition. If it is late at night, the patient may want to set her alarm clock to awaken herself and check for bleeding.

### **When to Bring the Patient in for Evaluation of Bleeding**

A decision to evaluate the patient in person is often made based upon individual circumstances. Use appropriate clinical judgment when deciding if the patient needs to be evaluated urgently. Although there is rarely a need for emergency suction curettage, the patient should be assessed promptly if she:

- reports prolonged heavy bleeding (for example, soaking 1 pad per hour for longer than 10-12 hours, or  $\geq 2$  pads/hour for longer than 4 hours)
- exhibits signs or symptoms of hypovolemia (see "Evaluating Bleeding Complaints" above)
- is obviously hemorrhaging

Additionally, a woman should be seen any time she or a support person requests/demands that she be seen. It is preferable, whenever possible, to manage the patient in the office or clinic, although there may be conditions under which evaluation in an Emergency Department (ED) may be more appropriate (for instance, if the patient is symptomatic for hypovolemia and will not be able to reach the clinic promptly, or

it is after hours). If the patient will be managed at her local ED, the licensed health professional on-call should notify the ED to advise them of the patient's impending arrival and to discuss possible management and follow-up instructions. Note that patient perception of bleeding quantity is often socioculturally influenced; across multiple clinical trials, the incidence of transfusion is less than 0.25%.<sup>9</sup>

### **Pain**

Some patients will complain of moderate to severe pain following the ingestion or insertion of misoprostol tablets. This pain is usually adequately managed with ibuprofen, 600-800 mg. Providers may also choose to offer their patients a prescription in advance for a mild narcotic, such as acetaminophen with codeine. Only very rarely will additional medications be needed.<sup>10</sup> Women may also find that a hot water bottle, heating pad, or abdominal massage provides some relief. Once the pregnancy has passed, the pain usually subsides. If pain is severe and not relieved by the use of analgesics and other measures described above, or if it begins more than 24 hours after taking misoprostol, the patient should contact her provider right away.

### **Temperature Elevation**

On occasion, a patient will develop a short-term elevated body temperature ( $<100.4^{\circ}$  F) after using misoprostol. This is almost always a prostaglandin effect from the misoprostol, and the body temperature should normalize within a fairly short period of time. It is wise to check these patients in 1-3 hours to verify the body temperature has returned to normal. If an elevated temperature begins more than approximately 12 hours after the misoprostol, or if a fever of  $\geq 100.4^{\circ}$  F persists for more than 4 hours, the patient should be evaluated for possible infection.

### **Nausea, Vomiting, Diarrhea**

A patient with preexisting severe pregnancy-related nausea or vomiting may do better with an aspiration curettage. However, many healthy patients will have one or more of these gastrointestinal side effects to a lesser degree within a few hours of using misoprostol. Rarely is any treatment necessary other than reassurance. Patients already experiencing pregnancy-related nausea may benefit from anti-emetics prior to initiating treatment, although there is no published evidence to support this practice. Patients should be instructed to increase their fluid intake to avoid dehydration. Additionally, instructing patients ahead of time to eat lightly before misoprostol use may help to minimize nausea. If symptoms persist, anti-emetics and/or anti-diarrheal agents may be prescribed. If more than 24 hours has passed after taking misoprostol and a woman then begins to experience nausea, vomiting or diarrhea, and/or feels other “flu-like” symptoms, such as weakness, abdominal discomfort or pain, she should contact her provider immediately (see “Atypical Infection” below).

### **Failure to Bleed**

Occasionally, a patient will experience little or no bleeding in the first 24 hours after the use of misoprostol. If there is any possibility of ectopic pregnancy (for instance, if a gestational sac was not identified on pre-treatment ultrasound and  $\beta$ hCGs were inconclusive), she should be promptly evaluated by a clinician. However, under most circumstances, she can be evaluated by phone and reassured that bleeding will likely begin spontaneously within the next 1-2 weeks. Alternatively, she can be offered a repeat dose of misoprostol.<sup>11</sup> If there is no bleeding after the second dose, she should be evaluated by a clinician. A surgical abortion will be necessary if an evaluation 14 days or more following the use of mifepristone reveals an ongoing pregnancy.

## **Atypical Infection**

Although otherwise unknown following medical abortion, 6 of the approximately 950,000 women who have used mifepristone and misoprostol to terminate a pregnancy in the U.S. during the last 8 years have succumbed to fatal toxic shock secondary to a fulminant *Clostridium* endometritis. Although FDA and CDC investigations have been pursued extensively, no causal relationship has been established between the medications and the infections; deaths from this condition have previously been reported following term childbirth as well as spontaneous abortion.<sup>12</sup> However, as with ectopic pregnancy, the lack of a causal relationship does not preclude its occurrence, and clinicians must be alert to the warning signs and symptoms of this rare post-obstetrical complication. Women must be counseled that the late appearance (e.g. >24 hrs after the use of misoprostol) of abdominal pain, discomfort, and/or "flu-like" symptoms (including nausea, diarrhea, vomiting, and weakness, but typically *without* fever) should be reported to their provider immediately. Clinicians should consider these symptoms, when combined with characteristic clinical findings (tachycardia, hemoconcentration and leukocytosis with a marked left shift) to be indicators for immediate hospital admission and consultation with an infectious disease specialist regarding the optimal methods for diagnosis and treatment of suspected anaerobic gram-positive bacilli.<sup>13</sup>

## **Follow-Up**

It is essential that completion of the abortion is confirmed.<sup>1</sup> Clinically speaking, patients may return for their follow-up evaluation any time after they feel that they have passed the pregnancy, but no later than approximately 2 weeks after their first visit. For administrative purposes, this follow-up visit may be scheduled before the patient leaves the office after receiving her initial medication, and the patient can be given a written reminder of the date and time of her follow-up appointment. If resources are available and privacy considerations are met, telephone reminders may increase the likelihood that these visits are kept. All practices must have protocols in place for managing patients who fail to return for their follow-up

appointment and for documenting attempts to contact the patient. For patient care quality assurance as well as for risk management purposes, multiple efforts should be made to contact any woman who has missed appointments and whose completed abortion has not been confirmed.

## **Contraception**

Women who have a medical abortion may begin ovulating again shortly after expulsion of the pregnancy. In some cases, this might be before the follow-up visit, depending on when it is scheduled. For this reason, it is advisable to discuss contraception and to offer patients some method of birth control at their first visit. Although there is a dearth of research about the initiation of contraception after medical abortion, if the patient wishes to start oral contraceptives, many clinicians are instructing women to start their first pack on either the day of misoprostol use or within 5 days of misoprostol use. Any of the hormonal methods (including DMPA, transdermal patch, vaginal ring, implant) initiated on this schedule should be effective by the time the woman resumes sexual intercourse. Some clinicians, however, may still prefer to wait until the follow-up visit to begin certain types of systemic contraception; for example, injectable contraceptives are often administered at the follow-up visit. There is currently little data on the relative risk of IUD expulsion when insertion is done at the follow-up visit. In the absence of such data, if a woman wants to use an IUD, the clinician may choose to schedule the insertion once the uterus has emptied and there is no risk of a new pregnancy. In all cases where initiation of hormonal contraception is delayed beyond the first 5 days following misoprostol use, it is important to provide patients with a back-up method of (barrier) contraception as they may already be ovulating at the time of the follow-up visit. Advance provision of EC should be made available to all women who do not have contraindications for its use.

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