

Hemorrhage risk group	Prevention and preparation measures
Low risk ☐ No prior cesarean deliveries ☐ Fewer than two prior cesarean deliveries and no previa or placenta accreta spectrum ☐ No bleeding disorder ☐ No history of obstetric hemorrhage	Measures for all ☐ Preoperative hemoglobin or hematocrit levels for later abortions; may be considered for first trimester abortions when the individual has a history of anemia ☐ Ultrasound for gestational duration ☐ Cervical preparation ☐ Dilators if >20 weeks ☐ Misoprostol or dilators if >13 weeks ☐ Consider vasopressin in paracervical block
Moderate risk ☐ ≥2 cesarean deliveries ☐ Prior cesarean delivery and previa ☐ Bleeding disorder ☐ History of obstetric hemorrhage ☐ Increasing maternal age ☐ Gestational duration >20 weeks ☐ Fibroids ☐ Fetal demise	All of the above, and consider... ☐ Consider transfusion consent ☐ Uterotonic medications readily accessible ☐ Consider intraoperative ultrasound guidance ☐ Cervical preparation with dilators if >20 weeks
High risk ☐ Placenta accreta spectrum, diagnosed or suspected ☐ Any of the "moderate risk" categories may be considered "high risk," per discretion of the clinician	All of the above, and consider... ☐ Refer to center with transfusion capability, anesthesia, and interventional radiology ☐ Transfusion and possible hysterectomy consents ☐ Preoperative creatinine, coagulation panel ☐ Type and cross ≥2 units

Fig. 1. Algorithm for classifying patients as being at low, moderate, or high risk for hemorrhage after abortion.

abortion is low and only of clinical importance for patients at increased risk of hemorrhage or preexisting anemia. Thus, we recommend the decision to undergo medication or procedural abortion be patient driven (GRADE 1A).

Defining hemorrhage after first-trimester medication abortion is more challenging, as blood loss is difficult to estimate. A large retrospective registry study published in 2011 erroneously found that the incidence of hemorrhage after first-trimester medication abortion was 15% [54], a number out of proportion to other reports, and reflective of an overly sensitive method of defining hemorrhage. In a large-scale prospective trial of more than 16,000 people undergoing medication abortion, only 0.1% experienced hemorrhage requiring transfusion [57]. In a study of over 10,000 medication abortions, hemorrhage occurred in 1.4 per 1000 [12]. A growing body of evidence supports the overall and hemorrhage-related safety of no-contact medication abortion—that is, screening by phone and administration of medications without a physical examination or ultrasound [58,59].

Because medication abortions are unsupervised, individuals who are anemic may not be ideal candidates. The average drop in hemoglobin is 0.7% [60], and most studies of medication abortion exclude those with a hemoglobin under 10 g/dL. While clinicians should exercise caution in offering medication abortion in the setting of anemia, the threshold of anemia that poses excessive risk is unclear. Most people undergoing medication abortion will have an uncomplicated course, and the decision to offer medication abortion

should be left to the clinician in consultation with the patient. Individuals who are anticoagulated or have bleeding disorders should be directed toward procedural abortion, which allows their bleeding to be monitored in a more controlled fashion. Counseling prior to medication abortion is vital to ensure that patients recognize when heavy bleeding is excessive, defined by many clinicians as soaking at least two pads per hour for two consecutive hours [4,61].

Hemorrhage associated with second-trimester medication abortion occurs most often in the setting of retained placenta [25]. In a retrospective review of more than 1000 cases of mid-trimester medication abortions using mifepristone and misoprostol, surgical intervention for a retained placenta was required in 8% of cases [62]. Smaller studies have reported both lower [63] and higher incidences of retained placenta [64–66] with similar regimens. Although retained placenta is not an uncommon complication of induction termination in the mid-trimester, associated hemorrhage is still rare. Misoprostol with or without mifepristone is associated with a lower incidence of hemorrhage (1%–2%) [56,63,67] than older induction techniques using intra-amniotic administration of saline, prostaglandin, and ethacridine lactate [53,63]. Mifepristone with misoprostol is associated with optimal efficacy, affecting delivery in the shortest time [68].

Individuals with placenta previa are not candidates for vaginal deliveries at term and are typically considered poor candidates for medication abortions in the second trimester. Those who have a low-lying placenta do not warrant the same concern and should not