

TABLE 1. Differential diagnosis of early-pregnancy vaginal bleeding

Differential diagnosis	Definition	Additional history	Physical examination	Diagnostic tests	Management
Spontaneous abortion (subtypes below)	Pregnancy loss at <20 weeks' gestation	Endocrine disorders, genetic aneuploidy, immunologic disorders, infection, chemical/radiation exposure, uterine abnormalities		<i>Transvaginal ultrasound (TVUS):</i> embryonic/fetal tissue without heart tones <i>β-human chorionic gonadotropin (β-hCG):</i> doubling rate <80% to 100% every 48 hours (failing intrauterine pregnancy [IUP]); deemed nonviable if <53%	β-hCG ratio <0.87 reliably predicts that the pregnancy will resolve spontaneously without intervention
Complete spontaneous abortion	All products of conception (POC) evacuated from uterus	Endocrine disorders, genetic aneuploidy, immunologic disorders, infection, chemical/radiation exposure, uterine abnormalities	Closed os		<i>Expectant:</i> observation, IV fluids; discharge home with obstetric (OB) follow-up and instructions to include no intercourse, bed rest, and return if bleeding worsens; repeat TVUS one week after initial presentation <i>Medical:</i> misoprostol (Cytotec) with follow-up appointment <i>Surgical:</i> dilation and curettage (D&C)
Incomplete spontaneous abortion	Some POC passed through dilated cervix	Endocrine disorders, genetic aneuploidy, immunologic disorders, infection, chemical/radiation exposure, uterine abnormalities	Open os with or without POC		<i>Expectant</i> (90% effective): observation, IV fluids, discharge home with OB follow-up and instructions to include no intercourse, bed rest, and return if bleeding worsens; repeat TVUS one week after initial presentation <i>Medical:</i> misoprostol with follow-up appointment <i>Surgical:</i> D&C
Inevitable spontaneous abortion	Bleeding and a dilated cervix with or without POC	Endocrine disorders, genetic aneuploidy, immunologic disorders, infection, chemical/radiation exposure, uterine abnormalities	Open os with or without POC	<i>Pathologic examination of POC:</i> chorionic villi observed	<i>Expectant:</i> observation, IV fluids, discharge home with OB follow-up and instructions to include no intercourse, bed rest, and return if bleeding worsens; repeat TVUS one week after initial presentation <i>Medical:</i> misoprostol with follow-up appointment <i>Surgical:</i> D&C
Septic spontaneous abortion	Incomplete spontaneous abortion plus infection	Peritoneal symptoms, fever	Peritoneal/adnexal signs, fever with or without dilated cervix and POC		Urgent antibiotic administration, uterine evacuation, and OB/GYN consult
Threatened abortion	Confirmed IUP, bleeding, cardiac activity, and closed os at <20 weeks' gestation		Closed os	TVUS: confirmed heart tones	<i>Expectant:</i> observation, IV fluids, discharge home with OB follow-up and instructions to include no intercourse, bed rest, and return if bleeding worsens; serial TVUS in place of serial β-hCG levels

Differential diagnosis	Definition	Additional history	Physical examination	Diagnostic tests	Management
Missed abortion	Embryo/fetus >5 mm, no heart tones, retained POC		Closed os	TVUS: intrauterine embryonic/fetal tissue without heart tones; β -hCG increase <53%	<i>Expectant:</i> observation, IV fluids, discharge home with OB follow-up and instructions to include no intercourse, bed rest, and return if bleeding worsens; repeat TVUS one week after initial presentation <i>Medical:</i> misoprostol with follow-up appointment <i>Surgical:</i> D&C or uterine aspiration
Ectopic pregnancy (EP)	A conceptus outside the uterus	Severe, sharp, unilateral, or bilateral adnexal pain; no passage of POC; amenorrhea; intrauterine device in place; history of EP; in utero exposure to diethylstilbestrol; genital infection; tubal surgery; in vitro fertilization; infertility; smoking	<i>Ruptured EP:</i> hypotension, absent/diminished bowel sounds, abdominal distension, hemodynamically unstable, ipsilateral shoulder pain <i>Unruptured EP:</i> uterus <8 weeks' gestational size, cervical motion tenderness, adnexal mass	TVUS: adnexal mass, free fluid in pelvis, cardiac activity detected outside of uterus, pseudogestational sac <i>Progesterone:</i> rule out EP with β -hCG values >2,000 IU/L and progesterone >22 ng/mL β -hCG: doubling rate <80% to 100% every 48 hours	<i>Ruptured EP:</i> IV fluids, monitor, oxygen, admission, open surgery <i>Expectant:</i> declining β -hCG values <1,000 mIU/mL, follow serial β -hCG levels to nonpregnant values <i>Medical:</i> methotrexate (Abitrexate, Folex, Mexate) if unruptured EP <3.5 cm, stable vitals, no fetal heartbeat, and β -hCG <15,000 mIU/mL <i>Surgical:</i> immediate hospitalization and stabilization if unruptured EP with β -hCG >15,000 mIU/mL
Gestational trophoblastic disease	Placental development without embryo	Hyperemesis, irregular and/or heavy bleeding, vaginal pain at <20 weeks' gestation	Uterus larger than gestational dates would suggest	TVUS: classic snowstorm appearance within uterine cavity	Surgery and close follow-up, urine β -hCG four to six weeks after pregnancy loss
Anembryonic pregnancy	Gestational sac >18 mm but no embryonic/fetal tissue	Regression of pregnancy symptoms		TVUS: lack of heart tones by 10 to 11 weeks' gestation and no tissue within gestational sac	<i>Medical:</i> misoprostol with follow-up appointment <i>Surgical:</i> D&C or uterine aspiration
Subchorionic hemorrhage	Blood between chorion and uterine wall			TVUS: blood between chorion and uterine wall; cardiac activity confirmed	Expectant management
Benign bleed of viable IUP	50% of all early-pregnancy bleeds		Minimal cervical/abdominal tenderness, benign adnexa, closed os, absence of POC, nonobstetric causes (e.g., polyps, sexually transmitted infection, vaginal trauma, cancer)	TVUS: yolk sac by 5 to 6 weeks' gestation, central blastocyst with chorionic villi and decidua, cardiac activity by 10 to 11 weeks' gestation with crown-rump length >5 mm <i>Progesterone:</i> >25 ng/mL β -hCG: 80% to 100% increase every 48 hours until 8 to 10 weeks' gestation	Expectant management