Pelvic Ultrasound: Vaginal Bleeding

Clinical Policy for the Initial Approach to Patients Presenting with a Chief Complaint of Vaginal Bleeding.

Rating (out of 4):

Scope
This guideline is intended for emergency physicians, but will also be interest to family physicians, obstetricians and gynecologists.

Clinical Question
How should abnormal vaginal bleeding in postmenarchal women be assessed and treated?

(Note: The original guideline does not specify the levels of evidence that support its recommendations. Therefore, this summary cannot rank recommendations according to evidence level, or provide any details about the evidence basis for specific recommendations).

**Bolded actions are rules. Actions not bolded are guidelines.**

**History**

**Description of Bleeding**
Heavy/significant bleeding: inspect for tissue in cervical os/erosive lesions, IV access, Hct, coagulation studies, beta-hCG

Tissue/clot passage: inspect tissue for fetal parts, submit tissue for pathologic analysis

**Menstrual History**
Premenopausal or perimenopausal: beta-hCG, Hct

Postmenopausal: Hct, referral

**Gynecologic History**
IUD or hormonal contraceptive use (oral): beta-hCG, Hct, evaluate for STD and vulvovaginitis
IUD or hormonal contraceptive use
(injected, implanted).............................................Hct, beta-hCG, evaluate for STD and
vulvovaginitis

Ectopic risk factors..............................................beta-hCG, pelvic ultrasound, consult

PID risk factors..................................................beta-hCG, evaluate for STD and
vulvovaginitis

History of gynaecologic malignancy,
Abnormal Pap smear, DES exposure.....................referral, Hct

Obstetric History

1st half of pregnancy or post-elective
termination.........................................................beta-hCG, Hct, Rh type, quantitative B-
hCG, pelvic ultrasound

2nd half of pregnancy.........................................assess for fetal heart tones, IV access,
Hct, Rh type, blood type and screen, pelvic
ultrasound for placental localization, consult

Less than 6 weeks postpartum..............................Hct, pelvic ultrasound

Associated Symptoms

Pain .................................................................beta-hCG, catheter urinalysis, evaluate for
STD and vulvovaginitis, pelvic ultrasound,
pain management

Weakness/syncope/near-syncope..........................beta-hCG, IV access, Hct

Bruising or bleeding tendencies.........................Hct, platelet count, coagulation studies

Urinary symptoms..............................................catheter urinalysis, evaluation for STD and
Vulvovaginitis

Vaginal discharge..............................................evaluate for STD and vulvovaginitis or
foreign Body

Past Medical History

Coagulopathy/anticoagulation............................Hct, platelet count, PT, PTT
Physical Examination

Vital Signs

Significant tachycardia/hypotension.......................... IV access, Hct, beta-hCG, fluid resuscitation, blood type and screen/crossmatch, consult

Fever.......................................................... evaluate for pelvic infection/STD/endometritis, CBC, catheter urinalysis, urine culture

Dermatologic

Ecchymoses, petechiae................................. Hct, platelet count, DIC panel, PT/PTT, d-Dimer

Abdominal Examination

Fetal heart tones........................................ ultrasound for gestational age and placental localization

Tenderness.................................................. beta-hCG, evaluate for pelvic infection/STD, pelvic ultrasound

Signs of peritoneal irritation............................. beta-hCG, IV access, CBC, ultrasound, culdocentesis, consult

Pelvic Examination

Heavy/significant bleeding........................... Inspect for erosive lesions/tissue in cervical os, beta-hCG, IV access, Hct, blood type and screen, consult

Adnexal/uterine mass or enlargement.................. beta-hCG, evaluate for pelvic infection/STD, Ultrasound

Cervical motion or uterine tenderness................. beta-hCG, evaluate for pelvic infection/STD

Bleeding vulvar/vaginal lesions........................ assess for traumatic etiology, referral for biopsy

Internal cervical os open.............................. Hct, consult

Tissue/clot in cervical os in 1st half of pregnancy.................................................. tissue removal, consult
Diagnostic Testing

Positive beta-hCG .......................................................... Hct, Rh type, quantitative beta-hCG, ultrasound

Rh typing in pregnancy – Rh negative .......................... evaluate for anti-D immune globulin (RhoGam) administration

Pelvic ultrasound: intrauterine pregnancy .................. Hct, Rh type, threatened abortion precautions

Pelvic ultrasound: no intrauterine pregnancy with positive beta-hCG .......................... consult, Hct, Rh type, quantitative beta-hCG, culdocentesis, ectopic precautions if discharged

Culdocentesis – non-clotting blood ........................ IV access, Hct, blood type and screen/crossmatch, consult

Hct – symptomatic anemia .................................... iron supplement, follow local transfusion guidelines, consult

Coagulation study – abnormal .................................. treat for specific deficiency, consult

STD evaluation – positive result or high clinical suspicion .................................................. beta hCG, follow CDC guidelines, referral for HIV testing, test for syphilis, counselling

Fetal heart rate in 2nd half of pregnancy (less than 120 beats/minute or greater than 160 beats/minute) .................. consult

Assessment

Pregnancy-related (1st half) bleeding
Threatened abortion – intrauterine pregnancy ........ Rh type, threatened abortion precautions

Threatened abortion – intrauterine pregnancy not confirmed .................................................. ectopic precautions if discharged, Rh type, quantitative beta-hCG, culdocentesis, pelvic ultrasound, consult

Inevitable abortion (internal os open) ......................... consult, Hct, Rh type, pelvic ultrasound

Incomplete abortion or post elective termination .................................................. send tissue (if any) to pathology, consult, Rh type, pelvic ultrasound, removal of products of conception from cervix
Presumed completed abortion……………………….referral to confirm completion, send tissue (if any) to pathology, Rh type, quantitative beta-hCG, pelvic ultrasound, ectopic precautions if discharged

Presumed fetal demise detected on ultrasound…………………………..consult, Rh type, quantitative beta-hCG

Ectopic pregnancy – presumed/probable…………………………..ultrasound/culdocentesis/consult, IV access, Hct, blood type and screen/crossmatch, Rh type, quantitative beta-hCG, admit/observation, ectopic precautions if discharged

Ectopic pregnancy – ultrasound consistent with ectopic…………………………..consult, ectopic precautions if discharged, IV access, Hct, blood type and screen/crossmatch, Rh type, quantitative beta-hCG, admit/observation

Molar pregnancy…………………………………….…consult, ultrasound, quantitative beta-hCG

Pregnancy-related (2nd half) bleeding – abruptio placenta……………………………………..fetal heart rate, IV access, Hct, blood type and screen/crossmatch, consult, oxygen, continuous fetal monitoring, DIC screening, platelet count, PT, PTT

Pregnancy-related (2nd half) bleeding – placenta previa……………………………………..fetal heart rate, Rh type, consult, IV access, continuous fetal monitoring, Hct, blood type and screen

Pregnancy-related (less than 6 weeks postpartum) bleeding…………………………..Hct, quantitative, beta-hCG, pelvic ultrasound, consult

Non-pregnancy-related PID or other sexually transmitted disease…………………………..follow CDC guidelines, syphilis testing, referral for HIV testing, counsel regarding notification partners/public health precautions, pain management, consult

Suspected cancer…………………………………………consult

Bleeding disorders…………………………………………initiate treatment for specific bleeding disorder, Consult

Anovulatory bleeding…………………………………consult

Local perineal/vulvar/vaginal/cervical lesion………culture lesion, consult

Uterine fibroids…………………………………………consult
Other medically related bleeding...assess for liver, kidney, thyroid dysfunction, Consult

Disposition

Admission...transfer care to accepting physician
Transfer...follow ACEP and other applicable transfer Policies
Discharge...provide referral for follow-up care, provide instructions regarding treatment and circumstances that require return to emergency department

APPENDIX A

Risk Factors for Ectopic Pregnancy
• prior ectopic pregnancy
• prior PID or STD
• IUD
• Infertility
• Recent elective abortion
• Tubal ligation or other tubal surgery
• In vitro fertilization or ovulation induction (frequently heterotopic)

Risk Factors for PID
• prior PID
• known current STD
• multiple sexual partners
• menses or elective abortion in past several days
• IUD
• Genital trauma
• Younger age

APPENDIX B

Sample discharge instructions for an ectopic pregnancy

We have checked you for the problems you are having with your pregnancy. Because your pregnancy is so early, we cannot tell whether the pregnancy is in the right place (your uterus). We are worried that you might have an ectopic pregnancy (a pregnancy outside the uterus).
What to do

- Do not take any medicines without talking to your doctor first.
- Take it easy if you are not feeling well. You do not need to stay in bed.
- Do not put anything in your vagina: no tampons, no sex, and no douching until the bleeding has stopped.
- If you have been told to have another blood test or ultrasound, return to the clinic, laboratory or emergency department as instructed.

Call your doctor or return if

- your bleeding increases and you use more than one pad per hour for 3 to 4 hours.
- You pass tissue or large clots.
- You have increased or new abdominal pain, cramping, back pain, or shoulder pain.
- You have severe nausea or vomiting.
- You feel weak, light-headed, or dizzy.

APPENDIX C

Sample discharge instructions for threatened miscarriage (for known intrauterine pregnancy only)

Some bleeding may happen early in pregnancy. In some cases, the pregnancy continues normally. In others, women go on to miscarry. When the opening to your uterus is still closed, you have a threatened miscarriage. It is sometimes hard to predict whether you will miscarry. If you are going to miscarry, there is nothing we can do to prevent it. If a miscarriage occurs, it is often because the fetus or placenta is not normal. In many cases, the cause is not known. Miscarriages are fairly common; they happen in about one in five pregnancies. Having a miscarriage does not change your chances of having a normal pregnancy in the future. If you do miscarry, the uterus may not clean itself out completely. A dilation and curettage (D&C) is often used to loosen or remove the tissue from the uterus and prevent infection after a miscarriage.

What to do

- Do not take any medicines without talking to your doctor first.
- Take it easy if you are not feeling well. You do not need to stay in bed.
- Do not put anything in your vagina: no tampons, no sex, and no douching until the bleeding has stopped.
- Save any tissue that you pass so that your doctor can see it at your next visit.

Call your doctor or return if

- You have severe abdominal pain or cramping.
- Your bleeding increases and you use more than one pad per hour for 3 to 4 hours.
- You have a fever over 100 degrees F (38 degrees C), or chills.
- You pass tissue or large clots (save these and bring them in with you).
ABBREVIATIONS

CBC – complete blood count
CDC – Centers for Disease Control and Prevention
DES – diethylstilbestrol
DIC – disseminated intravascular coagulation
Hct – hematocrit
HIV – human immunodeficiency virus
IV – intravenous
IUD – intrauterine device
PID – pelvic inflammatory disease
PT – prothrombin time
PTT – partial thromboplastin time
Rh – rhesus (blood factor)
STD – sexually transmitted disease

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