**EM Basic- Non-Pregnant Vaginal Bleeding**

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**Immediately**

Assess stability; move to resuscitate if indicated

**STABLE PATIENT (vast majority of ED vaginal bleeding)**

**History**

Amt of blood/clots: Get objective information (pads/hr, dimensions of clots vs. mild spotting)

Weakness, lightheaded, SOB, chest pain? – helps with determining plan

 Liver, renal, CV, heme disease?– Consider coagulopathy, hx of CAD/MI

that could be affected by anemia, hx of VTE could affect treatment, etc.

 Pain

Meds

**PEARL-** Ask specifically about IUD/Nexplanon, anticoagulating meds, chronic hormonal exposure

**Focused Gyn Hx (5 simple questions):**

1.) G’s and P’s: Ever pregnant, what were outcomes?

 2.) Are you menstruating, when was LMP?

 3.) Any abnormal Pap, gyn surgeries, or procedures done?

 4.) Sexually active, any hx of STI?

 5.) Anything else in personal/family gyn history? *Allow 5-10 seconds to*

 *get a really good answer—pt needs time to think here*

**PEARL-** 99% of the time it is best to get other people out of room when asking these questions; also sets the stage for your pelvic exam.

**Associated signs and symptoms**

Abdominal pain, nausea/vomiting, discharge

 Chest pain, SOB, dizziness, near syncope or syncope

**Exam**

Eyeball: is pt diaphoretic, pale, exsanguinating, altered ment. status?

 -> move to resuscitate

 General exam: Heart, lungs, sit/stand/walk patient as needed

 Abdominal: distention, dusky, color changes/bruising, peritoneal signs

 **Gyn**

**PEARL:** Consider keeping quasi-stable patient in monitored room (vs. gyn room) and use a flipped over bedpan to elevate buttocks for makeshift gyn bed

 Bring large swab sticks, extra gauze

 Gentle insertion of lubricated, approp. sized speculum

 Don’t forget to *explain every move you make*

 Chaperones for all patients, always, without exception

 Order: Inspect visually, use swab stick, then do bimanual

**PEARL-** If a pregnant patient is unstable or has a concerning abdominal exam, they need an immediate OB/GYN consultation and the OR.

**Differential Diagnosis**

Break down by Extra GU vs. not, then sort by menstrual status

***Extra-GU Causes***

Labial/skin tear

Hemorrhoids

Vulvar lesions

Rectovaginal fistula

Cystitis/UTI

***Pre-pubertal***

Neonate: Estrogen withdrawal bleed, 3d-3wk; reassure/educate

Most common: Vulvovaginitis (Streptococcal, environmental, non-specific)

Rule out: Trauma, foreign body, abuse

 FB: Ask about bad smell, time course

***Pre-menopausal*** – arrange by painful/non-painful

Painful: Ruptured ovarian cyst, PID, ovarian torsion, ruptured endometrioma, trauma, abuse

**PEARL**- torsion RARELY presents with bleeding

Painless: Cancer, coagulation disorder (esp. in 10s-30s age), non-malignant structural causes (leiomyoma, polyps, etc.), AUB, ovulatory UB

**PEARL**: Anovulatory uterine bleeding is 90% of painless VB, but is only diagnosed when you are confident it is not malignant/structural and is not from elsewhere in GU tract

Ovulatory uterine bleeding: “Really horrible period”

***Post-menopausal***

 Cancer- both Gyn and don’t forget hematologic (leukemias)

 Again think anatomically- ovaries/tubes/uterus/vagina

 Medication (supratherpeutic INR, novel anticoagulants, HRT)

 Non-malignant structural causes

 Atrophic vaginitis

**Workup**

*Most patients only need…*

**UA** (check for UTI, b-HCG for pregnancy status)

**CBC** (consider repeat at 3-4 hrs if you are observing)

 **+ differential** if any concern for malignancy (leukemia)

*Looking potentially sick?*

**Type and screen; move to cross-match if symptomatic + anemic**

*On warfarin, hx of liver disease?*

**PT and INR**

*Abnormal finding on gyn exam?*

**GC/Chlamydia**

*Symptomatic anemia + chest pain?*

**ECG, consider ACS and appropriate r/o MI work-up**

*Imaging?*

**Transabdominal + transvaginal pelvic US** is good first line, though not-needed in most patients in the ED (get as outpatient)

**Rx for Outpatient Management**

*Estrogen/Progesterone based therapy:*

 ACOG recs: Medroxyprogesterone acetate, 20 mg TID for 7 days

 Or try: OCP taper: find an OCP with 35 mcg ethinyl estradiol

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *# Pills* | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Heavy bleed | 5 | 4 | 3 | 2 | 1 |
| Mod Bleed | 3 | 3 | 2 | 2 | 1 |

Give anti-emetic (e.g. promethazine, 12.5-25 mg PO or PR, PRN)

**PEARL**- NO hormonal therapy in ED if hx of VTE or VTE risk factors, early post-partum, age >35 and smoker, multiple CV risk factors, active cancer, drug interactions (rifampin, anticonvulsants, antiretroviral), etc.

 Great reference: [List of Everything that Complicates OCPs](http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/Docs/USMEC-Color-62012.docx)

*Adjunct*

NSAIDS:  prostaglandins facilitate uterine vasoconstriction

Iron: Cheap/easy is ferrous sulfate, 325 mg TID between meals; warn of

black stools and potential for GI upset

**Disposition**

If sending home, give strict return precautions (return if <1 pad/hr, large clots, headaches, dizzy, etc.)

Always refer to gyn for postmenopausal bleeding to work-up for malignancy

*Special Circumstances*

1.) Continuously symptomatic/mod bleed/mod vitals: repeat labs in 4 hours or sooner if they decompensate

2.) Pregnant: If you somehow find +b-Hcg, do a workup to document intrauterine pregnancy

3.) Sexual abuse: Get social work, protective svc. on board early

4.) Foreign objects: Remove prior to discharge, get gyn if needed

5.) **Admit** if continuously symptomatic, transfusions required, serial H&H required, or definitive surgical care is indicated

**UNSTABLE PATIENT**

**Assemble a team early**, notify someone that blood MIGHT be needed,

Get access and draw labs:

 **CBC with diff**

 **HCG**

 **Type and screen**

 **Basic metabolic panel**

 **Coagulation panel**

 **Venous lactate**

**Place 2x IV**, preferably 16 gauge or better

Do not hesitate to move **to IO catheter** placement if needed

***Protect yourself!*:** Gloves/face shield/gown

**Grab supplies** to tamponade bleeding:

 Sterile gloves

 Kerlix gauze and 4x4s

 Bottle of betadine

 Abdominal pads

 Diapers

Foley catheter (24 French, and also get a large syringe and 60-120cc or more of saline to fill the bulb of the Foley)

Sengstaken-Blakemore tube or Bakri catheter + ring foreceps

**Pack uterus** with betadine-soaked gauze, give *plenty* of fast-acting analgesia (i.e. fentanyl) while instrumenting the vagina and uterus

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*Insertion of Bakri catheter (obmanagement.com)*

**Take a look** with tranabdominal US and consider FAST exam

 Nice guide to FAST: [Click here](http://vimeo.com/34118863)

 If free fluid + unstable + vaginal bleed -> PT GOES TO OR

**Now, take very focused hx**

 Hx of cancer or other bleeding problems?

 Any anticoagulating medication?

 Ever bled like this previously?

 Pregnant?

 At risk for abuse?

**BIG POINTS**

**1.) If stable, get hx of anticoagulating/hormonal meds, liver/renal/CV disease, quantified amount of bleeding, 5 key gyn questions.**

**2.) Always probe for trauma/abuse, easier to do when you are about to do the gyn exam and everyone is out of the room.**

**3.) Infant/child: rule out foreign body, trauma, abuse. Older: rule out trauma, then think painful vs. painless causes. Post-menopausal: think cancers**

**4.) Dispo: consider how symptomatic, and observe if she’s on the threshold. If going home, don’t forget to check contraindications to OCPs!**

**5.) To resuscitate VB: early IV access, load the boat, and consider using a big Foley, Bakri catheter, gauze/betadine to tamponade.**

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