Bleeding in Early Pregnancy

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Which Patient Concerns You Most?

- Tanya—31 yo with LMP 8 weeks ago presents with spotting and right iliac fossa pain
- Deb—23 yo with irregular menses, small amount of bright red PV bleeding and a positive home pregnancy test
- Jenn—41 yo undergoing IVF with rising BHCG and spotting
- Marie—35 yo with 2 prior losses who complains of large amount of painless PV bleeding at 10 weeks gestation

Objectives

- List the differential diagnosis of bleeding in early pregnancy
- Know which patients should be evaluated for possible ectopic pregnancy
- Counsel a patient undergoing a miscarriage
- Identify maternal sources of bleeding in early pregnancy
- Understand the implications of subchorionic haemorrhage in an ongoing pregnancy
- Identify patients requiring Anti D

Bleeding in Early Pregnancy

- First trimester bleeding occurs in 20-40% of patients
- Most often maternal
- Diagnosis made with exam, bloods and ultrasound
- 50% miscarriage rate

Differential Diagnosis

- Ectopic Pregnancy
- Miscarriage
- Implantation bleeding
- Vanishing Twin
- Bleeding from vessels in the endometrium
- Subchorionic haemorrhage
- Cervical/vaginal/uterine source

Scenario

- Tanya—31 yo with LMP 8 weeks ago presents with spotting and right iliac fossa pain
- 2 days of right iliac fossa pain worsening in intensity. Spotting requiring a pad for the same amount of time.
- 2 normal births at term
- Remote history of chlamydia as a teenager (treated)
- She and partner smoke
- No prior surgeries, no medications, no medical problems

Evaluation

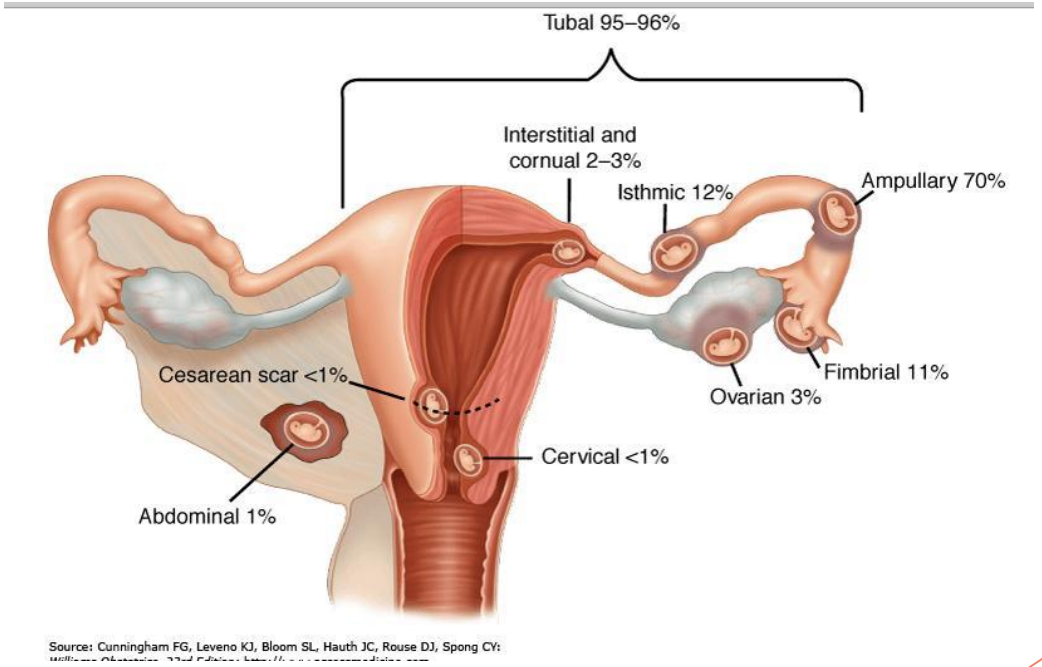
- History
  - Characterize the bleeding
  - Is there pain?
- Past medical/surgical history
  - Pregnancy history
  - Bleeding disorder?
  - Previous tubal or extensive abdominal surgery?
- Abdominal and pelvic exam
- Bloods: Rh status, CBC, BHCG
- Ultrasound

Scenario--Tanya

- T 37.5, HR 110, BP 90/50, RR 14
- Abdomen is tender with involuntary guarding
- Hgb 113
- UPT positive, BHCG 5,000
- Ultrasound shows a right adnexal mass, moderate amount of free fluid and no intrauterine pregnancy.

Ectopic Pregnancy

Must be considered and ruled out in every pregnant woman who presents with 1st trimester bleeding



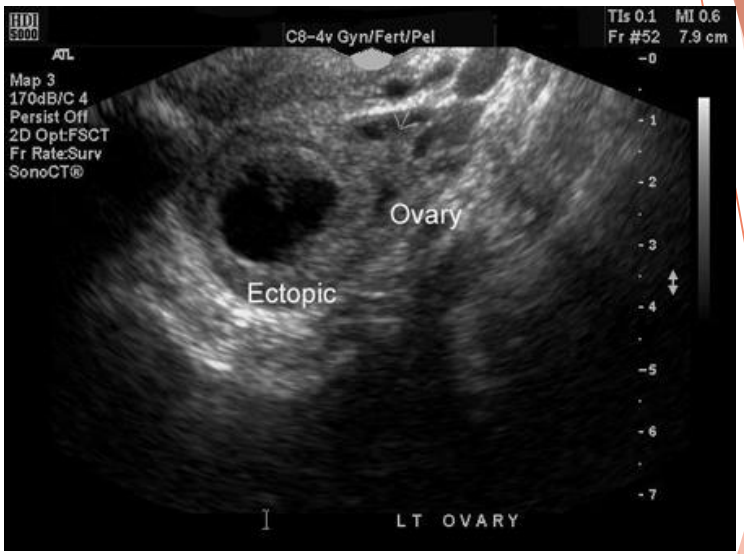
Source: Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Rouse DJ, Spong CY:

Ectopic Pregnancy

- Risk factors:
  - History of STIs (*c. trachomatis*)
  - Previous ectopic
  - Tubal surgery
  - IUD in place
  - Smoking

Ectopic Pregnancy—Diagnosis

- BHCG=2,000=Discriminatory Zone
- No IUP=ectopic until proven otherwise
- If BHCG<2,000 and clinically stable, follow the BHCG

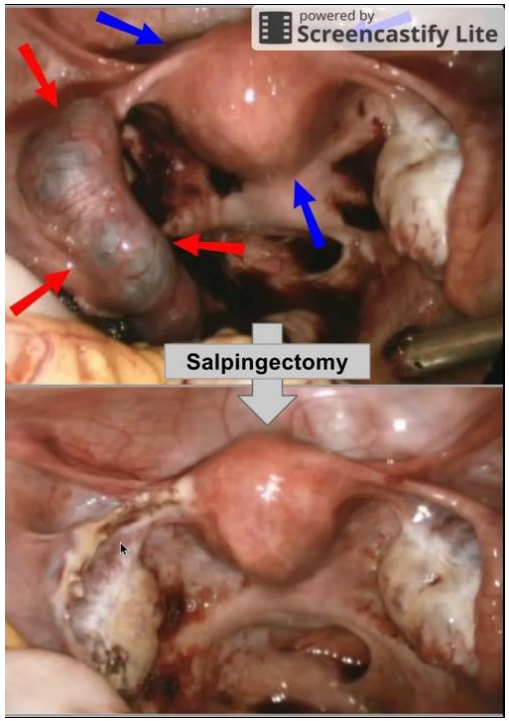


Ectopic Pregnancy—Medical Treatment

- Methotrexate (single or multidose)
- Contraindications
  - Ruptured
  - Mass >3.5cm
  - Foetal cardiac activity
  - BHCG > 6500
  - Kidney or Liver disease
  - Active pulmonary disease
  - Hematologic dysfunction
  - Unable/unlikely to follow up

Ectopic Pregnancy—Surgical Treatment

Salpingectomy



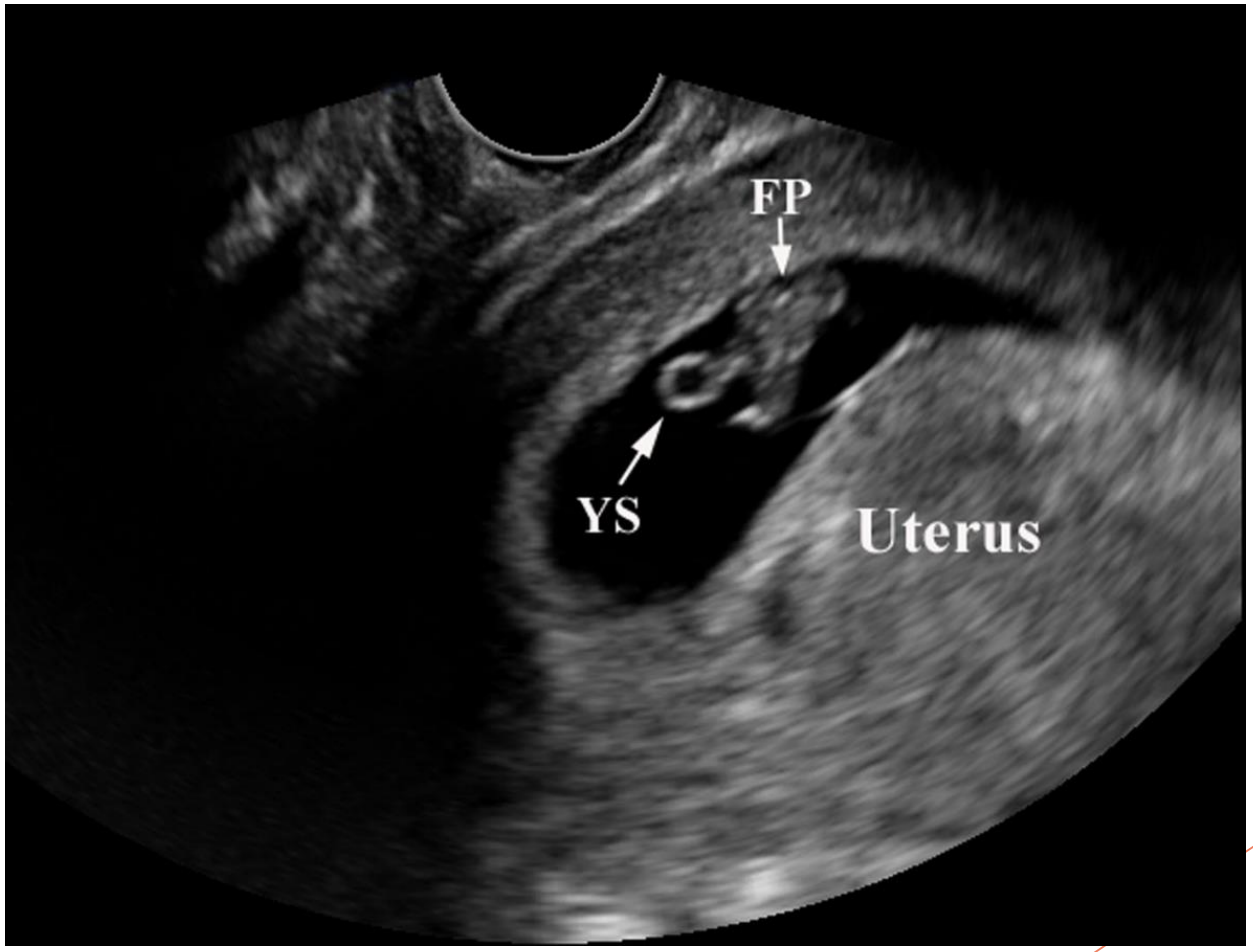
Salpingostomy

- Tube remains
- Same success rate
- Double the rate of recurrence

Scenario

- Jenn—41 yo undergoing IVF with rising BHCG and spotting
- Spotting for 2 days, denies any abdominal pain, endorses nausea and vomiting
- Fit and healthy, no prior medical history or surgery
- Ultrasound done at 6 weeks showed an intrauterine pregnancy with a gestational sac and fetal pole, slow cardiac activity was seen. Has repeat ultrasound planned in 1 week.

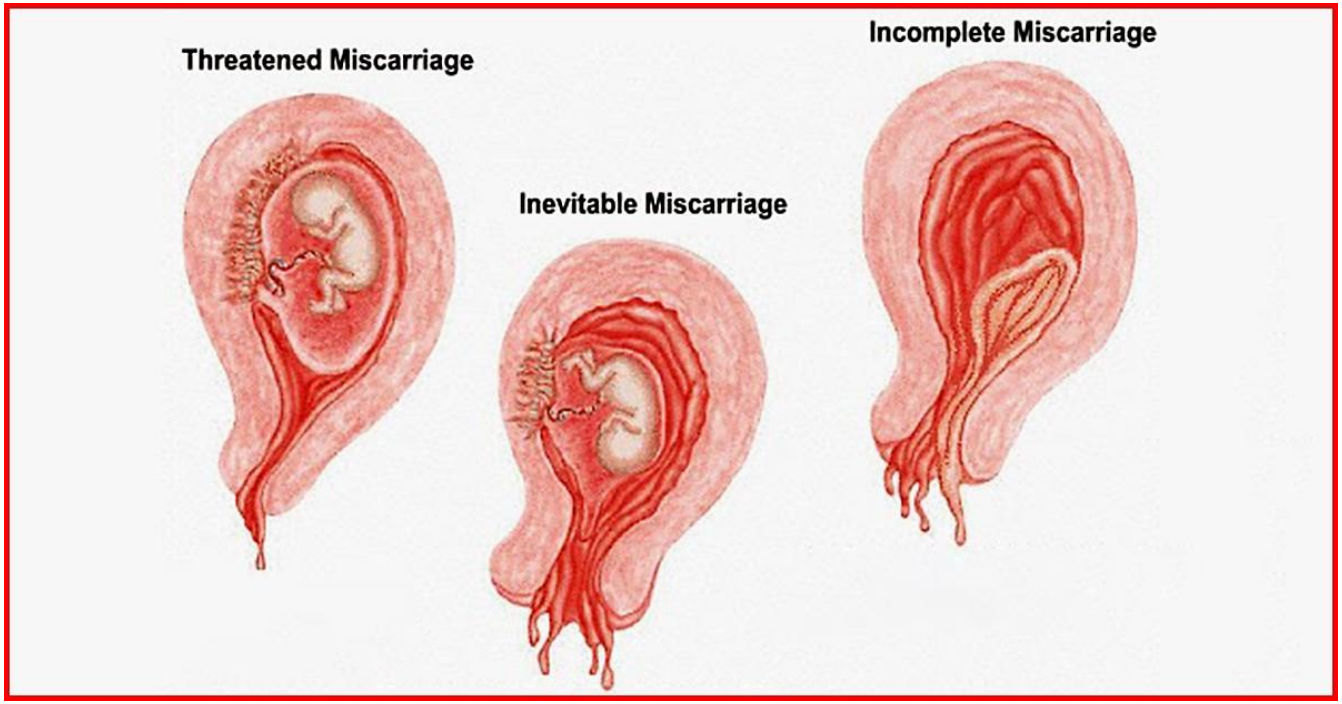
Jenn—Early US



Scenario—Jenn

- T 37.0, HR 70, BP 110/70, RR 10
- Abdominal and pelvic exams are unremarkable
- BHCG is not indicated
- Hgb 130
- Repeat US done one week later is similar but no fetal heart beat is seen

Miscarriage—Terminology



Missed miscarriage or missed abortion
Blighted ovum
Chemical pregnancy

Miscarriage

- 1:3-1:5 Pregnancies ends in miscarriage
- Cause: chromosomal abnormalities (50%)
- Risk Factors
  - Advanced maternal age
  - Previous miscarriage
  - Smoking, alcohol, drug use
  - NSAIDs
  - Poorly controlled diabetes, hypertension

Miscarriage

- Diagnosis:
  - Falling BHCG before an IUP is seen on US
  - Non progressing pregnancy radiologically
- Treatment:
  - Expectant
  - Medical
  - Surgical

WHY DOES IT MATTER?

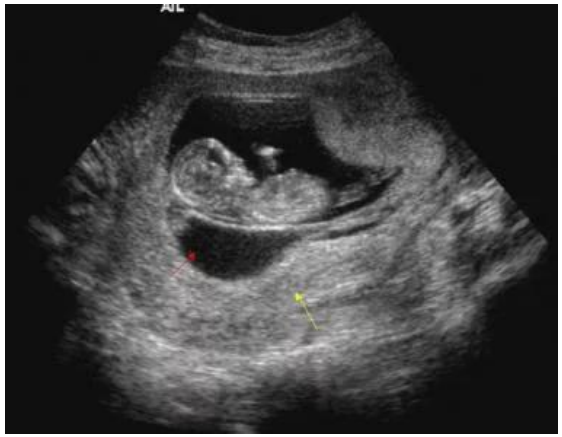
“When can I try again?”

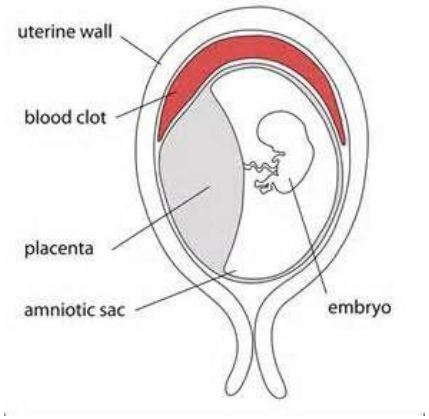
- As soon as she is ready
- Pregnancy rates are higher in women who try again within 3 months rather than waiting 3 months (70% v 51%).

Scenario

- Deb—23 yo with irregular menses, small amount of bright red PV bleeding and a positive home pregnancy test
- First pregnancy, unplanned
- Endorses mild cramping, nausea
- Fit and healthy, no previous medical or surgical history
- Obs are stable
- Abdominal and pelvic exam are unremarkable
- BHCG 20,234

Subchorionic Hematoma





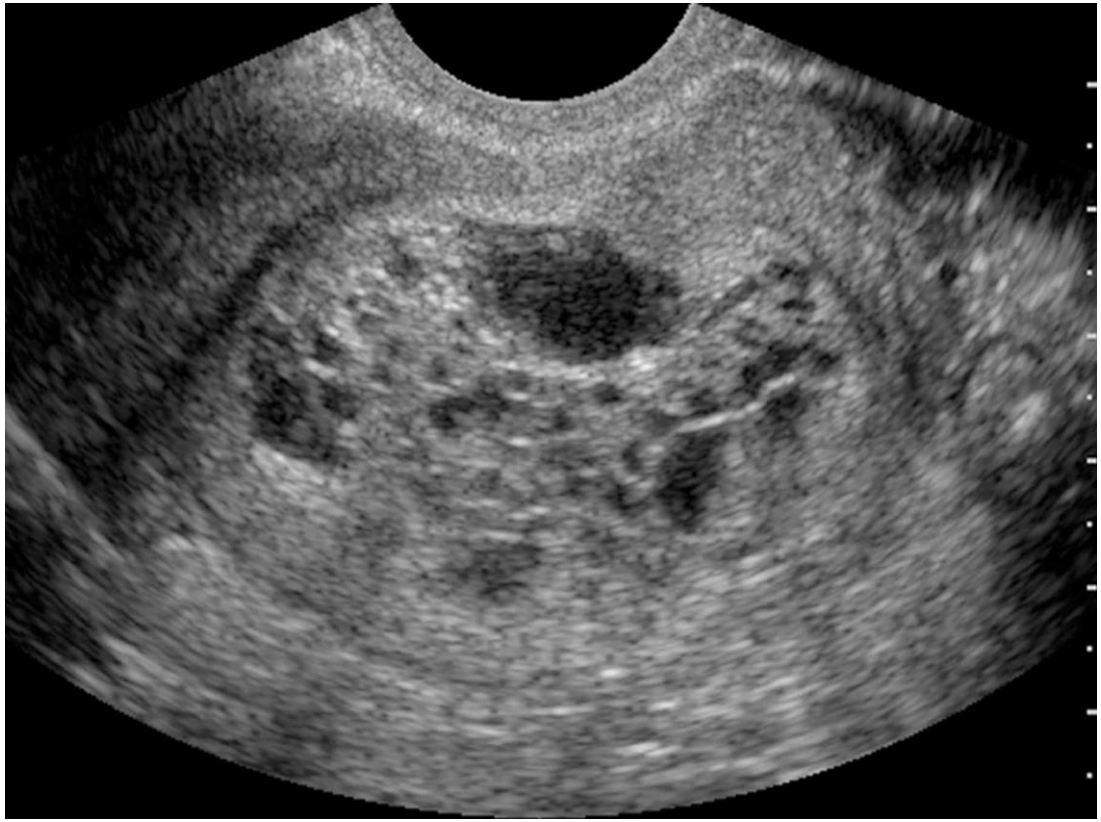
Increased risk of

- Miscarriage (OR 2.18)
- Stillbirth (OR 2.09)
- Placental abruption (OR 5.71)
- PPROM (OR 1.64)
- Preterm delivery (OR 1.40)

Implantation

- Bleeding 10-14 Days after fertilization
- Usually occurs at the time menses is expected
- Diagnosis of exclusion

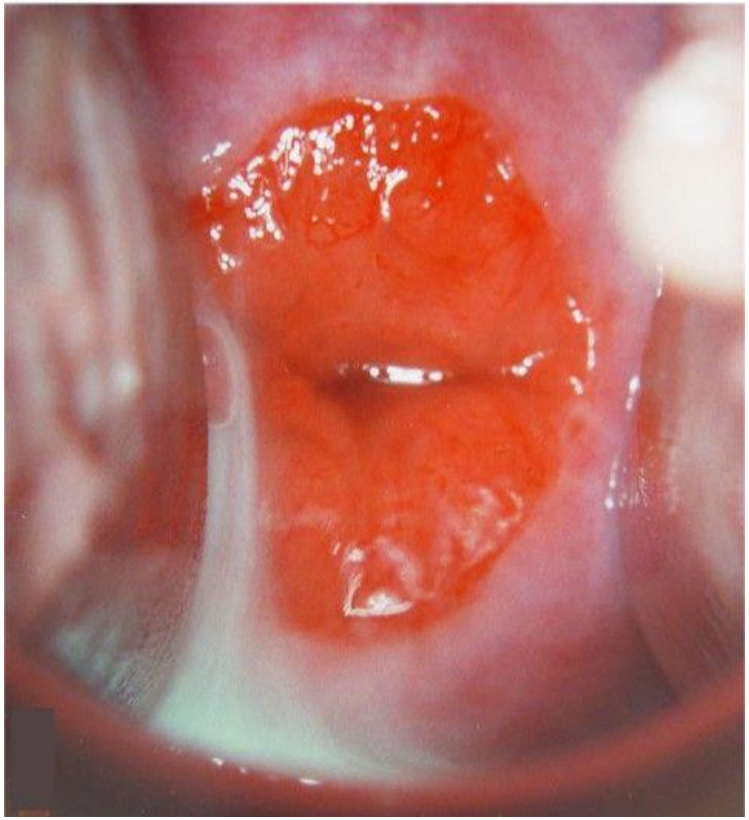
Molar Pregnancy



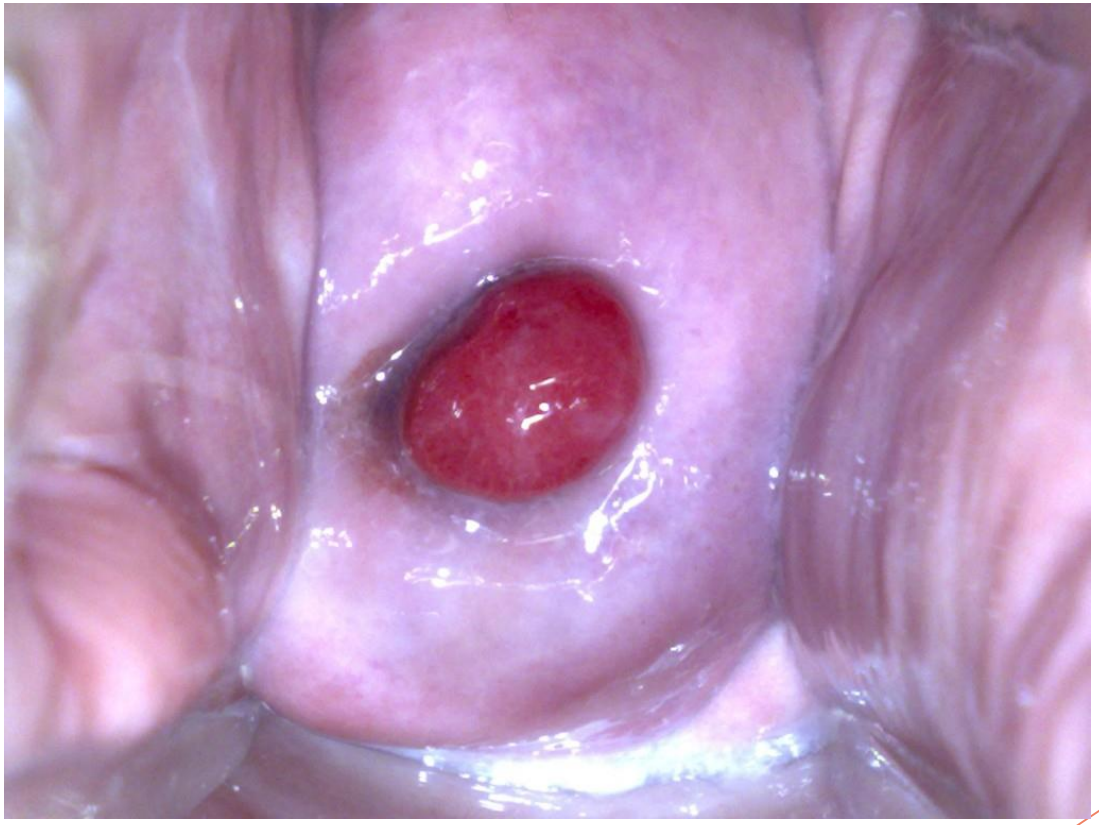
Scenario

- Marie—35 yo with 2 prior losses who complains of large amount of painless PV bleeding at 10 weeks gestation
- Fit and well, past history of LLETZ (2010) with normal smears since, non smoker
- Obs are normal
- Previously had an US at 7 weeks demonstrating a viable intrauterine pregnancy
- Abdominal exam unremarkable

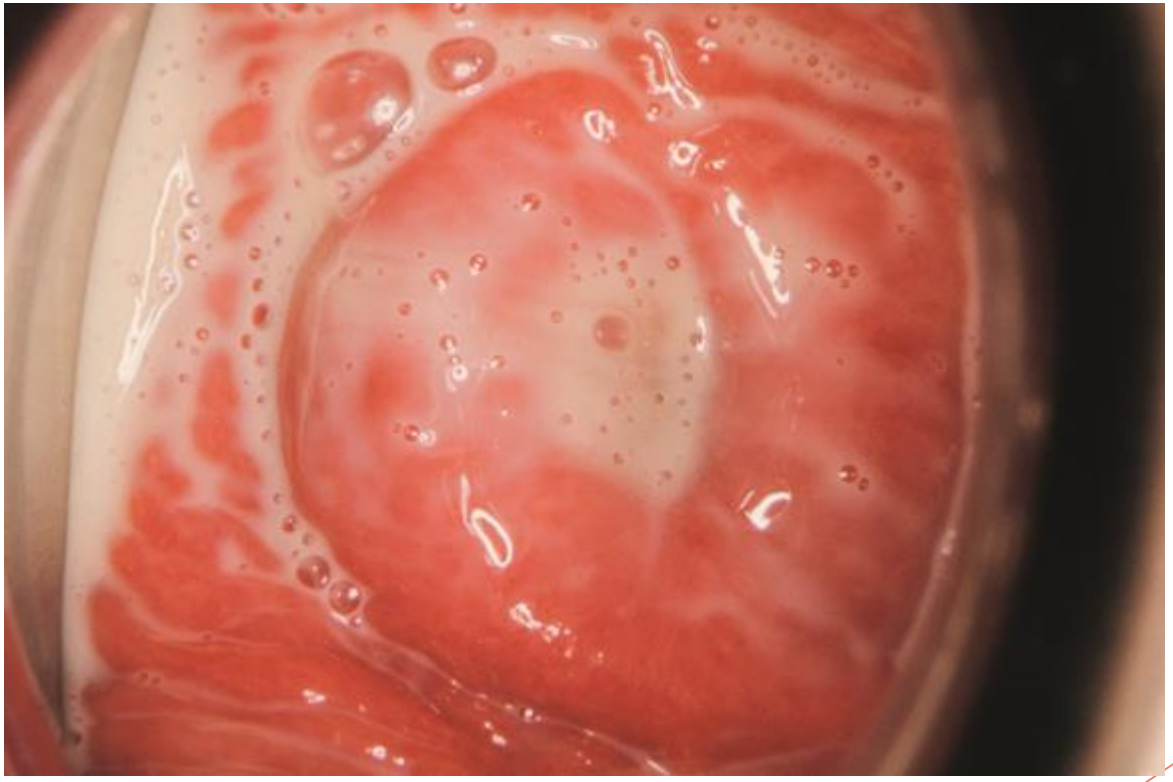
Ectropion



Cervical Polyp



Trichomonas



What if no source is found?

- Likely from the endometrium or edge of the placenta
- As long as ultrasound, obs and bloods are reassuring, watch and wait.

Implications of Early Bleeding

- 50% of women with bleeding in early pregnancy will miscarry
- Of those with an ongoing pregnancy, increased risk of
  - Preterm birth
  - Placental abruption
  - Recurrence of bleeding in a subsequent pregnancy


LINICAL
WASTE

Evaluation

- History
  - Characterize the bleeding
  - Is there pain?
- Past medical/surgical history
- Abdominal and pelvic exam
- Bloods: Rh status, CBC, BHCG
- Ultrasound

Bleeding in Early Pregnancy—Should You Be Concerned?

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YES!

References

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