Reproductive Health
Abdominal Pain and Abnormal Bleeding

Cynthia Cover CNM, MSN
Director, Midwife Services
Womens Health Institute
Cleveland Clinic

Elliot H. Philipson, MD MBA
Professor, CCLCM
Chairman, Department of Ob/Gyn at Hillcrest Hospital
Division of Maternal-Fetal Medicine
Womens Health Institute
Cleveland Clinic

Case #1

• Ms. Sophie Chen, a 22 year old, newly married woman, calls your office to make an appointment because she has been bleeding heavily for the past 4 months.

• She states that this is embarrassing because the bleeding started right after she married.

• She hates doctors, and all medical providers after she saw how her mother had several surgeries for “women “ kind of things.

• She herself has never had a Pap test and uses no contraception.

• Should she come and see you or just tell her to wait a few more cycles and keep a menstrual calendar? What are the possibilities?
In Your Clinical Office….

- She tells you that she has had abdominal pain almost all the time. She denies fever or chills. She has been terrified about getting pregnant and has been too frightened to discuss this with her husband or her mother.
- She weighs 220 lbs and is 5’ 4” in tall (BMI= 37.8)
- On exam, her vital signs are stable and she is obviously scared. Your exam reveals nothing exceptional except for some areas on her chin and upper lip with some hair. She has mild acne.
- On pelvic exam, the external genitalia are normal and there is a thick white vaginal discharge. The cervix appears nulliparous and the uterus is normal size. The right adnexa appears to have a fullness, maybe even a mass is present. It is quite tender on palpation. The left adnexa also seems enlarged. The rectal is negative.

What Are The Possibilities ? What Do You Do Next ?

- You do a pregnancy test, it’s negative
- You order a CBC and that is normal.
- You do a Pap and HPV test and the results are pending
- You do a Wet mount and you see some spores

Next ?
- Look for evidence of hyperandrogenism, ie elevated total testosterone (ovary) and DHEAS (adrenal). It’s mildly elevated.
- Thyroid studies Normal range
- Fasting glucose and insulin Increased
- Ultrasound not available in your area

- What’s your diagnosis?
  - Find a OB/GYN or endocrinologist to help?
Diagnosis?

• Polycystic Ovary Syndrome (PCOS)
  – Ovarian dysfunction, hyperandrogenism, polycystic ovaries
  – More than 12 follicles or large ovarian volume
  – Need 2 of 3

• Treatment:
  – Weight loss and weight loss!
  – Not attempting pregnancy
    – Oral contraceptives
    – Cyclic progesterone - monthly
    – Metformin if insulin resistant
  – Attempting pregnancy
    – Metformin 1000 mg/day, class B
    – Clomiphene citrate- (50-150 mg X 5 days, day 5 to 9 in the cycle)
    – Reproductive Endocrinology and Infertility provider (REI)
    – Further Rx - FSH injections, ovarian drilling, IVF

Case #2

• Ms. Brown is a 42 year old, G3 P3 office worker who feels as though she has gained too much weight for the amount of food that she is eating.

• She feels full all the time and it seems to her that she has some pressure “down there”. Her menses are regular but she has to use more pads now than ever.

• She has always had a normal doctor’s visit and her Pap smears have been normal. The only medication that she takes is a “thyroid “ pill but has not had any problem with this in many years. She uses no contraception cause he got “fixed”.

• What are the possibilities?
On Exam....

• Vital signs are stable and her BP is 135/80. She is a little heavy (BMI 31) and in no distress.

• Your exam reveals nothing exceptional except for her abdomen. It is distended and there is a non-tender mass in the midline.

• On pelvic exam, the external genitalia are normal and there is a normal vaginal discharge. The cervix appears multiparous and the uterus is enlarged- above the umbilicus. It is irregular but firm in consistency. It is not mobile but slightly tender on deep palpation. The adnexa can not be appreciated and the rectal exam is negative.

What are the Possibilities? What do you do Next?

• You do a pregnancy test, it’s negative
• You order a CBC and that is mildly anemic
• Her Pap and HPV test were negative 6 months ago
• You order a Ca 125, its in the normal range
• Order an ultrasound
• What’s Your Diagnosis?
**Diagnosis?**

- Cancer - ovary, endometrium
  - Rapid change, pressure, abdominal mass
- Cervix - normal appearance, normal Pap (many)
- Uterus - fibroid uterus, myoma
  - Large, firm, irregular
  - Possibility of sarcoma
- Ultrasound
- More Work-up
  - IVP, CXR, consult with GYN oncologist
  - Medical to shrink myomas if thought benign
  - Probable surgery – hysterectomy
- Hint - Age

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**Abdominal Pain and Bleeding**

- Good functional or practical way to categorize!
  - Reproductive Age
  - Premenopausal
  - Menopausal
## Abdominal Pain and Bleeding: Premenopausal

<table>
<thead>
<tr>
<th>Pain</th>
<th>Bleeding</th>
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<tbody>
<tr>
<td>• Not common without bleeding</td>
<td>• Anovulatory or ovulatory</td>
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</table>
| • Anovulatory or **ovulatory**  
  – Bloating, cramping, tenderness | • Polycystic ovary syndrome (PCOS), other cysts |
| • Polycystic ovary syndrome (PCOS), other cysts | • Structural abnormalities (myomas, etc) |
| • Structural abnormalities (myomas, etc) | • Dyspareunia |
| • Dyspareunia | • Foreign bodies, trauma |
| • Foreign bodies, trauma | • Infection, ie PID |
| • Infection, ie PID | • Malignancy |

## Abnormal Uterine Bleeding

- Excessive, erratic or irregular  
  – Maybe as high as 30-40% of women who have it
- **Menorrhagia**  
  – > 80 cc’s. of blood  
  – Alkaline hematin assay
- **Metrorrhagia**  
  – Irregular episodes
- **Oligomenorrhea**  
  – Cycles longer than 35 days
- **Polymenorrhea**  
  – Cycles less than 21 days
Abdominal Pain and Bleeding: Premenopausal - Work-up and Evaluation

Pain
• Event diary
• What makes it better/worse
• CBC + diff
• Temperature charting
• Ultrasound exam

Bleeding
• Event diary
• What makes it better/worse
• CBC + diff
• Temperature charting
• Ultrasound exam
• SIS (Saline Infusion Sonography)

Fibroids

1st trimester twins (arrows) with 2 large fibroids (stars)

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Fibroids In Pregnancy

• Common with prevalence 1.6 to 10.7 percent
• Most are asymptomatic
• Sx: usually pain (degeneration) or bleeding
• Can cause pregnancy loss
• Can interfere with
  – Labor
    – Small increase in preterm labor, abruption, fetal malpresentation, dysfunctional labor
  – Delivery
    – Increased risk of Cesarean and/or hemorrhage
• Management
  – Expectant
  – Pain relief
  – Transfusion

Uterine Fibroids

• Myomas, leiomyomas: size, shape, location vary small to large almost always benign
• Estrogen and progesterone involved in growth
• Symptoms: none, change in menses, pain, pressure, miscarriages and infertility
• Diagnosis: ultrasound and hysteroscopy
• Management
  – Pain medication; Treat anemia
  – Oral contraceptives; Mirena IUD
  – GnRh agonists (Lupron use <6 months)
  – Myomectomy
  – Endometrial ablation if fibroid <3cm
  – Uterine artery embolization
  – MRI guided ultrasound surgery
  – Transfusion
Endometriosis

- Incidence: 6-10% women of reproductive age; 20-30% in infertile women; 70-80% of women with chronic pelvic pain
- Stroma and glands (with inflammation & fibrosis) not in the uterus, pathogenesis is complex
- Can be asymptomatic but often pain: dysmenorrhea, dyspareunia, adnexal mass (degree of pain may not correlate with findings)
- Diagnosis: only by histology due to variable appearances; Imaging studies not helpful unless there is a mass
- Classification systems: severity/location
Endometriosis

• Treatment depends on issue
  – Infertility
    – No value of medical suppression (OC or GnRH agonists)
    – Surgery may improve pregnancy rates
  – Pain
    – Progestins, Danazol, Continuous OC, NSAIDS, GnRH agonists for 3m
  – Non-gyn pain
    – IBD, cystitis, UTIs
    – Laparoscopy by specialists
Endometrial Ablation

- Surgical destruction of endometrium to treat abnormal bleeding

- 2 techniques
  - **Resectoscopic instruments** (loop or rollerball) ablates endometrium under hysteroscopic visualization
  - **Non-resectoscopic devices** deliver energy to uniformly destroy the lining; referred to as second generation ablation; requires less specialized training plus shorter operative time; hysteroscopy performed before the procedure
    - **Novasure** uses bipolar radiofrequency
    - **ThermaChoice** uses hot liquid filled balloon
    - Others devices: HerOption cryotherapy, Microwave Endometrial Ablation, Hydro ThermAblator
Endometrial Ablation: Non-Resectoscopic Devices

Novasure bipolar radiofrequency using a mesh probe

ThermaChoice hot liquid filled balloon

Abdominal Pain and Bleeding: Menopausal

Pain
- Not common without bleeding
- Structural Abnormalities
  - Myomas, etc
- Dyspareunia
- Trauma
- Infection
- Malignancy or cysts

Bleeding
- Anovulatory
- Structural abnormalities
- Mucosa - thin and atrophic
- Trauma
- Infection
- Malignancy or Cysts
Abdominal Pain and Bleeding

• Whatever age  
  – Good and complete history!
• Complete physical exam  
• Lab work  
• Procedures  
• Referrals  
• Menopausal  
  – Think malignancy until proven otherwise