Chapter 33 - Acute Pelvic Pain in Women

Episode overview:

1) List 8 diagnoses of pelvic pain in women that are of reproductive tract origin
2) List 3 causes of pelvic pain in the pregnant patient who is:
   ▪ Fewer than 20 weeks pregnant
   ▪ Greater than 20 weeks pregnant

WiseCracks:

1) List 6 life threatening causes of acute pelvic pain in women
2) Outline a systematic approach to acute pelvic pain in women
3) List 6 risk factors for ectopic pregnancy

Rosen’s in Perspective

A patient presenting with acute pain from pelvic pathology is common, manifesting as:
   ▪ Diffuse pain
   ▪ Lower abdominal pain
   ▪ Pelvic pain
   ▪ Low back pain

It is important to recognize that a patient with chronic pelvic pain may also have an acute process, either related to the chronic condition or arising de novo. The female pelvis contains:
   ▪ Vagina
   ▪ Uterus
   ▪ Fallopian tubes and Ovaries
   ▪ Ureters and Urinary bladder
   ▪ Sigmoid colon and rectum

Inflammation, distention, ischemia of these organs or the spillage of blood, pus, or other material into the pelvis can drive pain. This is often difficult to localize because the pain is often visceral from the common afferents supplying the organs.
Questions

1) List the 8 diagnoses of pelvic pain in (non-pregnant) women that are of reproductive tract origin?

**Reproductive Tract**

<table>
<thead>
<tr>
<th>Mechanical</th>
<th>Infectious</th>
<th>Neoplastic</th>
<th>Dx of Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovarian torsion</td>
<td>PID</td>
<td>Endometriosis</td>
<td>Dysmenorrhea</td>
</tr>
<tr>
<td>Ovarian cyst</td>
<td>Salpingitis</td>
<td>Fibroids</td>
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<tr>
<td>Uterine perforation</td>
<td>Endometritis</td>
<td>Neoplasm</td>
<td></td>
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<td></td>
<td>Tubo-ovarian abscess</td>
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2) List 3 causes of pelvic pain in the pregnant patient <20 weeks or >20 weeks that is pregnancy related

1st trimester
- Ectopic pregnancy
- Threatened abortion / non-viable pregnancy
- Ovarian hyper stimulation syndrome (think if IVF)

2nd-3rd trimester
- Placenta previa
- Placental abruption
- Round ligament pain
- Braxton hicks

**WiseCracks:**

1) List 6 life threatening causes of acute pelvic pain in women

**Life threatening diagnoses NOT to miss:**
- **PID**
- **Tubo-ovarian abscess**
- **Ectopic pregnancy**
- **Hemorrhagic ovarian cyst (ruptured)**
- **Appendicitis**
- **Bowel/uterine perforation**
2) Outline a systematic approach to acute pelvic pain in women

Diagnostic approach
- Think
  - Reproductive tract / urinary tract / intestines / PREGNANCY
  - Hx and physical are insufficient to rule in or out pathology
    - ask about high risk sexual features
    - use of fertility treatments or surgery
  - Most acute serious pathologies have less than 48 hrs of pain
- Symptoms
  - Lateral pain = ovary or tube pathology
    - may also be appendix, diverticulitis or colic
    - benign: mittelschmerz, luteum cyst
  - Central pain = uterus or bladder pathology
    - PID, endometritis, dysmenorrhea, fibroids
  - Pain radiating to rectum = pooling of blood in the cul de sac
  - Diffuse pain = PID / infection / bowel pathology
  - LNMP hx is useful
- Signs
  - Abdominal and pelvic exam on all
  - Women > 20 weeks pregnant should have a recent U/S FIRST before pelvic

Multiple Etiologies to Consider **think anatomically**

Reproductive tract
- Ovarian torsion / cyst / TOA
- PID / Salpingitis / endometritis
- endometriosis / uterine perforation / fibroids / dysmenorrhea / neoplasm

Pregnancy related
- 1st trimester
  - ectopic pregnancy / ovarian hyperstimulation syndrome
  - threatened abortion / non-viable pregnancy
- 2nd-3rd trimester
  - placenta previa
  - placental abruption
  - round ligament pain / braxton hicks
Intestinal tract
- Appendicitis / ischemic bowel / perforated viscous / IBS/IBD / etc.

Urinary tract
- Pyelonephritis / cystitis / ureteral stone

Vascular
- Septic pelvic thrombophlebitis / ovarian vein thrombosis / sickle cell disease

Musculoskeletal
- Muscular strain/sprain / hernia / abdominal wall hematoma

Neuro / Psych
- Abdominal migraine / herpes zoster / depression

Lab tests and imaging
- Pregnancy test!
- Urine-analysis
- Hob, Hot, Rh status
- Ultrasound
- +/- CT scan (appendicitis / colic)

Diagnostic algorithm
- See Rosen’s pg. 270, but basically goes systematically through the various systems

Empirical management
- ABCs MOVIE etc.
- Life threatening hemorrhage caused by:
  - ECTOPIC
  - Placental abruption
  - Hemorrhagic ovarian cyst

3) List 6 risk factors for ectopic pregnancy
- PID history
- Smoker
- Pelvic / tubal / ovarian surgery
- Prior ectopic pregnancy
- IUD
- Undergoing reproductive technology

- Heterotopic pregnancy:
  - 1:8000
  - 1: 100 in women with IVF / Fertility treatment