



# Foundations Frameworks

## Approach to Female Pelvic Pain

FOUNDATIONS  
of Emergency Medicine

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**Lower abdominal pain** in women can be gastrointestinal, gynecologic, urinary, or musculoskeletal in origin. A careful history and physical, as always, is crucial in finding the etiology of the discomfort, but often needs augmentation with labs and/or imaging.

### Step 1: Is the patient pregnant?

- If so this raises the concern for complications of pregnancy, but don't forget that the pain may be unrelated to the pregnancy
  - Life threats vary based on pregnancy stage
    - First trimester: ectopic, molar pregnancy, septic abortion
    - Second/third trimesters: premature labor, abruption
  - Labs to get: quantitative hCG, CBC, chem, UA, ABO/Rh (if bleeding)
  - Imaging: bedside US for FHTs, pregnancy location, and placental lie

### Step 2: Is the patient febrile?

A fever suggests infection rather than structural pathology such as torsion or ectopic pregnancy

- GI or urinary infections: appendicitis, perirectal abscess, pyelonephritis, infected stone
- Gyn infections: TOA, PID, septic abortion, retained products of conception, endometritis

### Step 3: Where is the pain?

- Adnexal tenderness suggests ovarian or tubal pathology, but may also be present in e.g. appendicitis or diverticulitis
- Diffuse tenderness suggests bladder or uterine pathology, e.g. cervicitis, endometritis, PID, endometriosis, etc.

### Step 4: Does the patient need imaging?

- If gyn pathology is highest on the differential, ultrasound should be the modality of choice, as it has higher specificity than CT for ovarian and uterine pathology
- If GI or GU pathology is highest on the differential, CT is preferred
  - If the patient is pregnant, MRI is preferred given its lack of ionizing radiation

### Step 5: Does the patient need to be seen by a specialist?

- Emergent gyn:
  - Pregnant: ectopic, abruption, missed/septic abortion, IUFD, labor
  - Non-pregnant: ovarian torsion, TOA, endometritis, cyst with large bleeding
- Emergent surgery: appendicitis, complicated diverticulitis
- Emergent urology: infected stone

### References:

- Lipsky A and Hart D. *Rosen's Emergency Medicine*, 9e. Chapter 30: "Acute Pelvic Pain." Elsevier 2018, pp. 262-269.
- Heniff M and Fleming HRB. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*, 8e. Chapter 97: "Abdominal and Pelvic Pain in the Nonpregnant Female."