Pelvic Pain

Pre-Evaluation Parameters

If patient presents with ***ACUTE PELVIC PAIN*** and has ***UNSTABLE VITAL SIGNS (HYPOTENSION, TACHYCARDIA, OR FEVER) IMMEDIATE MEDEVAC TO HIGHER LEVEL OF CARE INDICATED!!***

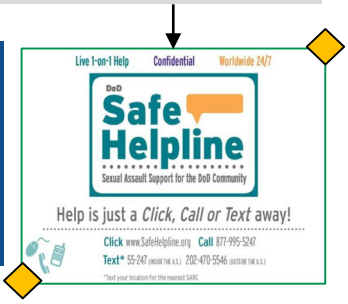
If patient presents with acute pelvic pain and has stable vital signs, then proceed with following assessment. Diagnostic imaging may be performed as indicated while in port.

Flow Chart to Evaluate Pelvic Pain

Decision-Making Process

History, physical examination, and pregnancy test

Screen for history of abuse and domestic violence



Pregnant?

Yes → Evaluate for ectopic pregnancy with quantitative beta-subunit of human chronic gonadotropin test and transvaginal ultrasonography

No

Right lower quadrant abdominal pain or pain migration from periumbilical area to right lower quadrant of abdomen?

Yes → Consider surgical consultation and laparotomy for appendicitis; if diagnosis in doubt, consider ultrasonography or abdominal and pelvic CT with intravenous contrast media

No

Cervical motion, uterine, or adnexal tenderness?

Yes → Consider pelvic inflammatory disease; obtain transvaginal ultrasonography to evaluate for tubo-ovarian abscess

No

Pelvic mass on examination?

Yes → Consider ovarian cyst, ovarian torsion, degenerating uterine fibroid, or endometriosis; obtain transvaginal ultrasonography.

No

Dysuria and white blood cells on urinalysis?

Yes → Evaluate for urinary tract infection or pyelonephritis; obtain urine culture

No

Gross or microscopic hematuria?

Yes → Hematuria may be secondary to vaginal bleeding; consider kidney stone and stone protocol CT

No

Consider transvaginal ultrasonography to evaluate for other diagnoses

Color Key:

- General flow chart pathway
- Decision factor
- Recommended treatment
- Click for more information

Flow Chart to Evaluate Pelvic Pain

Decision-Making Process

Pregnancy is ruled out

Screen for history of abuse and domestic violence

Right lower quadrant pain, McBurney point tenderness, positive psoas or Rovsing sign (palpation in the left lower quadrant causes pain in the right lower quadrant)

Yes → Consider appendicitis; perform computed tomography of abdomen/pelvis with oral and intravenous contrast media; surgical consultation

No

Adnexal mass and/or unilateral adnexal tenderness on bimanual examination?

Yes → Consider ovarian cyst or ovarian torsion; perform transvaginal ultrasonography; gynecologic consultation if ovarian torsion is suspected

No

Cervical motion tenderness on bimanual examination?

Yes → Consider pelvic inflammatory disease; perform transvaginal ultrasonography to evaluate for tubo-ovarian abscess if fevers, leukocystosis present

No

Uterosacral ligament tenderness or nodules on bimanual examination?

Yes → Consider endometriosis

No

Positive Carnett sign (increased pain to palpation when the abdominal wall is voluntarily contracted?)

Yes → Consider abdominal wall etiologies

Color Key:

- General flow chart pathway
- Decision factor
- Recommended treatment
- Click for more information

Pelvic Pain: History, Physical Exam, and Testing

History:

- Location, radiation, change over time
- Onset sudden or gradual, duration, circumstance of origination
- Character, per patient words (dull, sharp, colicky, waxing, waning), cyclic, what makes it worse or better, pain related behavior does patient display, pain scale
- Prior history of pain, is it similar or different
- Any other symptoms associated such as discharge/bleeding associated, time of month patient in cycle, N/V/D/Fever
- GYN history- regular, irregular, missed menses, lochia amount, duration, mode of contraception, sexually active, prior STI's, Pap results, surgeries

Physical Exam:

- General: appearance, comfortable vs writhing in pain, disoriented/hallucinating
- Vital sign:- Hypotension, tachycardia, or fever emergent transfer
- Abdominal Inspection: distention, visible m:asses, erythema, ecchymosis, scars, hernias; Auscultation - bowel sound character, may use stethoscope for anxious patients anticipating pain; Palpation - peritoneal signs, areas of tenderness, trigger points, masses, organomegaly, abdominal wall tense test (Carnett's sign), rebound tenderness; Examine flank, inguinal area, and lower back for ecchymosis, tenderness, and lymphadenopathy
- Pelvis
- External genitalia- rashes, edema, discoloration; palpate Bartholin and Skene's glands and urethra for abnormality/tenderness/drainage
- Speculum
- Vagina- abnormal discharge, laceration, or foreign body
- Cervix- abnormal discharge, laceration, polyps, ulceration, mass, or evidence of infection
- Obtain samples for GC/CT, KOH, and Wet Prep for microscopic examination
- Bimanual
- Palpate introital and pelvic floor muscles for abnormal tenderness or trigger points, uterus size, shape, and symmetry, cervical motion tenderness, adnexa for masses/tenderness

Testing:

- Laboratory- urine/serum hCG, CBC, UA with culture if UA shows hematuria or pyuria, GC/CT, KOH and Wet Prep if indicated
- Imaging- Ultrasound of pelvis, abdominal/pelvic CT and/or MRI

Location of Pain for Common Diseases that Cause Acute Pelvic Pain

Periumbilical pain
All visceral diseases in their early stages
Abdominal trauma
Abdominal wall hernias
Bowel obstruction
Diffuse or generalized pain
All visceral pathologies late in their course
Pelvic inflammatory disease
Endometriosis
Muscular strain or sprain
Bowel obstruction
Left lower quadrant
Adnexal torsion
Constipation
Crohn's disease
Diverticulitis
Ectopic pregnancy
Endometriosis
Inflammation or perforation of colonic carcinoma
Irritable bowel syndrome
Ovarian cyst or ruptured ovarian cyst
Pyelonephritis
Salpingitis
Urinary calculi

Right lower quadrant
Appendicitis
Ectopic pregnancy
Adnexal torsion
Ovarian cyst or ruptured ovarian cyst
Urinary calculi
Endometriosis
Pyelonephritis
Meckel diverticulitis
Regional enteritis (Crohn's disease)
Salpingitis
Suprapubic pain
Obstruction of the urinary bladder
Cystitis
Urinary calculi
Lumbar radiation
Colonic obstruction
Pyelonephritis
Urinary calculi
Flank pain
Urinary calculi

Pelvic Causes of Abdominal Pain in Women

Pelvic causes of abdominal pain in women	Lateralization	Clinical features	Comments
Ectopic pregnancy	Either side or diffuse abdominal pain	Vaginal bleeding with abdominal pain, typically six to eight weeks after last menstrual period.	Patients can present with life-threatening hemorrhage if ruptured.
Pelvic inflammatory disease	Lateralization uncommon	Characterized by the acute onset of lower abdominal or pelvic pain, pelvic organ tenderness, and evidence of inflammation of the genital tract. Often associated with cervical discharge.	Wide spectrum of clinical presentations.
Ovarian torsion	Localized to one side	Acute onset of moderate-to-severe pelvic pain, often with nausea and possibly vomiting, in a woman with an adnexal mass.	Generally not associated with vaginal discharge.
Ruptured ovarian cyst	Localized to one side	Sudden-onset unilateral lower abdominal pain. The classic presentation is sudden onset of severe focal lower quadrant pain following sexual intercourse.	Generally not associated with vaginal discharge.
Endometriosis		Associated with dysmenorrhea, pelvic pain, dyspareunia, and/or infertility, but other symptoms may also be present (eg, bowel or bladder symptoms).	Patients may present with one symptom or a combination of symptoms.
Acute endometritis		Most often preceded by pelvic inflammatory disease.	Diagnostic criteria the same as pelvic inflammatory disease.
Chronic endometritis		Present with abnormal uterine bleeding, which may consist of intermenstrual bleeding, spotting, postcoital bleeding, menorrhagia, or amenorrhea. Vague, crampy lower abdominal pain accompanies the bleeding or may occur alone.	
Leiomyomas (fibroids)		Symptoms related to bulk or infrequently acute pain from degeneration or torsion of pedunculate tumor. Pain may be associated with a low-grade fever, uterine tenderness on palpation, elevated white blood cell count, or peritoneal signs.	
Ovarian hyperstimulation		Abdominal distention/discomfort, nausea/vomiting, and diarrhea. More severe cases can have severe abdominal pain, ascites, intractable nausea, and vomiting.	Women undergoing fertility treatment.
Ovarian cancer		Abdominal or pelvic pain. May have associated symptoms of bloating, urinary urgency or frequency, or difficulty eating/feeling full quickly.	
Ovulatory pain (Mittelsmerz)		Occurs mid-cycle, coinciding with timing of ovulation.	May be right- or left-sided, depending on site of ovulation during that cycle.
Pregnancy and related complications*			

* Refer to the UpToDate topics on abdominal pain.

Causes of Chronic Pelvic Pain

Gynecologic:

- Endometriosis
- Leiomyoma
- Adenomyosis
- Recurrent ovarian cysts
- Hydrosalpinx
- Ovarian remnant syndrome
- Pelvic inflammatory disease
- Pelvic adhesive disease
- Post-tubal ligation pain syndrome

Gastroenterologic:

- Irritable bowel syndrome
- Inflammatory bowel disease
- Chronic constipation
- Colorecta carcinoma
- Celiac disease
- Abdominal/pelvic hernias

Urologic:

- Interstitial cystitis/painful bladder syndrome
- Radiation cystitis
- Bladder cancer
- Urethral syndrome
- Recurrent cystitis
- Recurrent/chronic urolithiasis

Musculoskeletal:

- Abdominal wall myofascial pain (including trigger points)
- Pelvic floor tension myalgia
- Fibromyalgia
- Coccygodynia
- Piriformis syndrome

Vascular:

- Vulvar varicosities
- Pelvic congestion syndrome

Neurologic:

- Abdominal wall cutaneous nerve entrapment (ilionguinal and iliohypogastric)
- Pudendal neuralgia
- Central sensitization of pain