Common causes of low abdominal (pelvic) pain in women of reproductive age

This table is intended as a guide to assist with the diagnosis of a new onset of low abdominal (pelvic) pain among women of reproductive age but is not an exhaustive list. Note that concurrent diagnoses are common and may result in mixed signs and symptoms. Fever and raised WCC may be present among women presenting with acute pelvic pain from any cause, however these signs are non-specific and their presence or absence does not necessarily support or exclude a specific diagnosis.

Typical presentation	Findings that support the diagnosis	Definitive diagnostic findings
 Pelvic pain and/or bleeding in the first trimester (typically 6 to 8 weeks) Pain may localize to one side 	Positive pregnancy test	Ectopic pregnancy identified on imaging and/or laparoscopy
 Acute onset (hours to days) Migration of pain from peri umbilicus to RIF Systemic symptoms present: anorexia, nausea, vomiting 	 Migration of pain from umbilicus to right iliac fossa Onset of pain not associated with menses McBurney's point site of maximal tenderness 	Appendicitis confirmed on imaging, laparoscopic and/or histological findings
 Sudden onset of unilateral pelvic pain, more common in the right iliac fossa May be associated with vaginal bleeding 	Adnexal mass felt on bimanual examination	Ruptured ovarian cyst identified on imaging and/or laparoscopy
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 Onset days to weeks and typically starts at the time of disruption of blood vessels ² Similar to period pain in character and distribution – initially bilateral but may localise to right or left iliac fossa 	 Onset of pain typically occurs at the time of disruption of blood vessels ² No migration of pain from periumbilicus Pain on moving the cervix Rapid response to appropriate 	Endometritis /Salpingitis and /or tubo- ovarian abscess identified at laparoscopy and/or on histology Causative organism(s) identified from pelvic fluid or endometrial samples
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	 Pain may refer to RUQ³ Abnormal or inter-menstrual bleeding and/or vaginal discharge may be present 	Other findings that support the diagnosis but their absence does not exclude PID Chlamydia, gonorrhoea or M. Genitalium detected ⁴ Muco-purulent cervical discharge on examination Recent diagnosis of chlamydia, gonorrhoea or urethritis in the woman or a sexual partner	
		New partner in the last 6 months	
UTI	Dysuria, frequency +/- suprapubic pain	 Dysuria, frequency and /or positive nitrites on urinalysis 	Causative organism identified on urine culture
Pyelonephritis	 Pain ascends unilaterally from the suprapubic area through the iliac fossa to the renal angle Systemic symptoms may be present 	Renal angle tenderness	
Other common causes	of physiological or chronic pelvic pain that m	ay be concurrent or need to be excluded	
Endometriosis	 Dysmenorrhoea Pelvic pain similar in character and distribution to period pain but not confined to the first few days of menses Deep dyspareunia Bowel symptoms may be present Typical chronic rather than an acute onset Cyclical nature 	Pain does not respond to PID antibiotic treatment	Endometriosis identified by laparoscopic and/or histological findings

Mittleschmerz /Mid Cycle/ Ovulation pain	•	Typically mild unilateral iliac fossa pain last a few hours to a few days	•	Mid cycle of a regular menstrual cycle	
Physiological period pain	•	Typically bilateral pelvic pain, onset with menstruation Pain may refer to lower back /upper thighs	•	Onset at the time of menstruation, last 1-2 days only	

Footnotes

¹ Pelvic Inflammatory Disease (PID) encompasses endometritis, salpingitis, tubo-ovarian abscess. Among pregnant women PID may present as pain and /or bleeding in 1st trimester (threatened or complete miscarriage) or post-partum (endometritis)

² Menstruation, following rupture of membranes or instrumentation of the genital tract (e.g. TOP/ IUCD insertion)

³ Fitz Hugh Curtis syndrome

⁴ It is a sexually transmitted condition although for various reasons no causative organism is detected in up to 70% of cases of PID