

## New onset low abdominal pain in women of reproductive age

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## New onset low abdominal pain: why it matters?



- Can be fatal (consider ectopic pregnancy in all women of reproductive age)
- Pelvic Inflammatory Disease (PID) under-recognized with serious sequelae
- New PID guidelines
- IUD use increasing amongst young women (understanding pelvic pain in this context)
- Where general practice meets gynaecology, general surgery, sexual health and family planning
- Introducing a new management tool






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## New onset low abdominal pain: learning objectives



- Awareness of DDx and their presentations
- Familiarisation with new management tool
- Tips on conducting a well-directed history and examination
- Use of appropriate point of care tests and other investigations
- Knowing when to refer
- Awareness of new guidelines for Ix and Mx of PID (including role of Mycoplasma genitalium)
- Knowledge of professional and patient resources





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## New onset low abdominal pain: differential diagnoses include....



- Pregnancy complications: ectopic pregnancy, miscarriage
- Pelvic Inflammatory Disease (PID)
- Ovarian pathology: cyst rupture/torsion
- Acute appendicitis
- UTI, pyelonephritis
- Chronic conditions that may be concurrent/need exclusion: endometriosis, mid-cycle ovulation pain, dysmenorrhoea






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## Taking a well directed history

**Pain**  
Nature, duration, severity  
Generalised or localized  
referred, radiating,  
migrating

**Dyspareunia (deep)**

**Systemic symptoms:**  
Fever, anorexia, nausea,  
vomiting

**Vaginal bleeding:**  
LMP, intermenstrual, post-coital  
or heavy menstrual bleeding



**General history**  
Medical and surgical  
Medications  
Allergies

**Contraceptive history**

**Sexual history**  
Regular, casual partner(s)

**Obstetric and gynae history**  
Pregnancy  
Recent termination  
Instrumentation

**Gastrointestinal or  
Genitourinary  
symptoms**  
(vaginal discharge)





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## Kalista 22 years presents with acute low abdominal pain



- Pain: new onset 2 days, worsening past 24 hours, 8/10 severity
- Systemic symptoms: nausea
- Vaginal bleeding: LMP 8 weeks ago, spot bleeding past 24 hours
- Nil surgical or significant medical history
- No known pregnancies; regular partner of 2 years
- Contraception: taking COC, frequently misses pills
- Vital signs: pulse 100/min; BP 118/76; temp 37.5° C
- Abdominal palpation: mildly tender localising to LIF, no rebound

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ASHA AUSTRALASIAN SEXUAL HEALTH ALLIANCE

Perform a urine pregnancy test for all women of reproductive age from menarche to menopause with new onset low abdominal pain



Kalista's pregnancy test is positive

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ASHA AUSTRALASIAN SEXUAL HEALTH ALLIANCE

Introducing a management flowchart for new onset lower abdominal pain in young women developed in collaboration with NSW PID Working Group and Emergency Care Institute

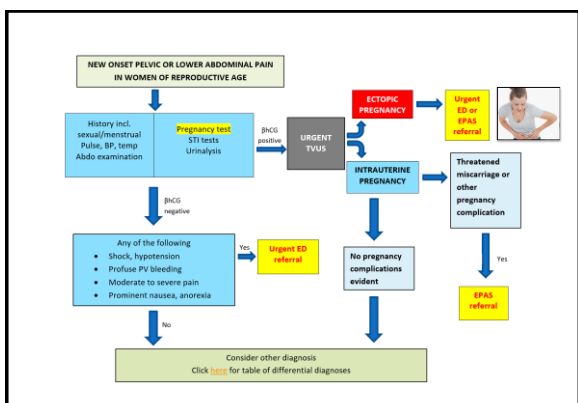


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Tahlia, 24 years presents with low abdominal pain

- Worsening generalized pain past 10 days (4/10 severity), deep dyspareunia
- Feels generally well
- Nil GI or GU symptoms (no PV discharge)
- Unremarkable medical and surgical history
- G1P0 (surgical abortion 9m ago); hormonal IUD inserted immediately
- LMP 6m ago; post-coital bleeding last 2 weeks
- Sexual history.....



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Taking a (reliable) sexual history:

- Disclosure requires a sensitive non-judgemental approach
- I'd like to ask you some questions about sex. Is that ok?
- Other than your regular partner have you had sex with anyone else? In the last 3 months, how many sexual partners have you had?
- When was the last time you had vaginal intercourse?
- Did you use a condom?
- Have you ever been diagnosed with (or thought you had) an STI?

What do we do next?

I've got a regular partner but had sex with a casual partner 3 weeks ago - we didn't use a condom

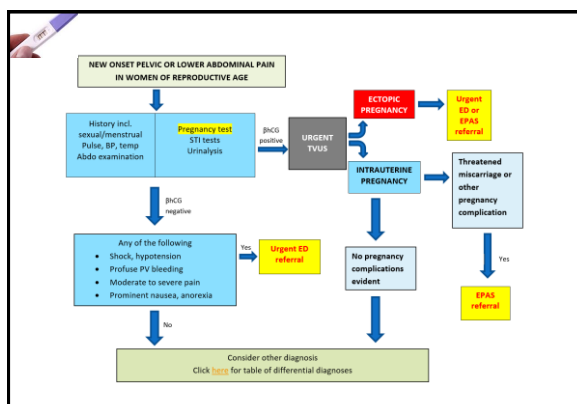


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### New onset low abdominal pain: performing a physical examination


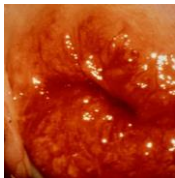


- Vital signs
- Abdominal palpation
- After explaining reasons and gaining consent:
  - Speculum examination
    - mucopurulent cervical discharge, cervicitis
    - bleeding from cervical os
    - IUD threads or stem
  - Bimanual examination
    - cervical motion tenderness
    - uterine tenderness
    - adnexal tenderness/masses



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### Which is the normal cervix and which has cervicitis?

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### New onset low abdominal pain: primary care investigations



- Urine B-HCG
- Endocervical swabs \* for NAAT for:
  - Chlamydia trachomatis, Neisseria gonorrhoea, Mycoplasma genitalium*
  - (consider *N.gonorrhoea* culture with antibiotic sensitivities if mucopurulent discharge)
- Vaginal swab M/C/S
- Clean catch MSU; send for M/C/S if nitrites + and/or dysuria, frequency or renal angle pain (beware UTI over-diagnosis)
- Consider FBC EUC

\*May be performed on self or clinician-collected high vaginal swab or first pass urine if speculum exam not performed


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### Tahlia's examination findings:

- Inflamed, erythematous, friable cervix
- small amount of discharge
- IUD threads 2.5cm
- cervical motion tenderness
- uterine tenderness on bimanual exam

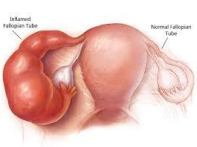
You make a diagnosis of probable PID



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### PID: a syndrome of great variability...




- Under-recognised cause of new onset low abdominal pain
- Spectrum of ascending inflammatory disorders from vagina or cervix: endometritis, salpingitis, tubo-ovarian abscess and pelvic peritonitis
- Variation in symptoms and severity
- Prompt treatment to prevent long-term sequelae

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### Risk factors for PID?





- PID in young women is mostly a sexually transmitted condition
- Always poly-microbial including vaginal bacteria
- In up to 70% no causal STI organism is identified
- Gonorrhoea, Chlamydia, Mycoplasma genitalium detected in some cases


**Risk Factors**

- Young age 15-25 years; recent STI; recent change of partner; partner STI or symptoms
- Recent uterine instrumentation or pregnancy

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### PID: long term effects?



- Studies challenging: laparoscopy is gold standard for Dx
- Hospital admissions decreasing but ambulatory care increasing
- ~ 12% women suffer enough tubal damage from one episode of PID to become infertile; reaches > 50% after 3 episodes....
- Fertility usually maintained with treatment but risk of ectopic pregnancy and chronic pain exists
- Earlier treatment associated with lower risk of complications

Weström L. Effect of acute pelvic inflammatory disease on fertility. Am J Obstet Gynecol. 1975




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### PID: signs and symptoms

Signs and symptoms	Considerations
Characteristics of the pain	Onset days to weeks; typically bilateral, may worsen with movement and localise to one side; 'like period pain' May refer to RUQ (FitzHugh Curtis Syndrome)
Dyspareunia	Deep
Vaginal/cervical discharge	Mucopurulent cervical discharge and/or bleeding (cervicitis) may be present but discharge is typically absent or minimal with chlamydia PID
Vaginal bleeding	Intermenstrual, post-coital or heavy menstrual bleeding
Fever, nausea, vomiting	Indicates severe infection; their absence does not exclude a diagnosis

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### High index of suspicion Low threshold for treatment

A diagnosis of PID and empirical antibiotic treatment should be considered and usually offered in any young (under 25) sexually active woman who has recent onset, lower abdominal pain associated with local tenderness and/or cervical excitation on bimanual vaginal examination and in whom pregnancy has been excluded

Begin treatment without waiting for results  
Negative swab tests do not exclude PID

UK National guideline 2011 British Association for Sexual Health and HIV (BASHH)


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### New antibiotic guidelines cover potential infection with chlamydia, gono, MG & poly-microbial vaginal flora


[www.stigidelines.com.au](http://www.stigidelines.com.au)

Ceftriaxone 500mg in 2mL of 1% lignocaine IMI  
 +  
 Azithromycin 1g PO stat  
 +  
 Metronidazole 400mg PO bd for 14 days  
 +  
 Doxycycline 100mg PO bd for 14 days



If pregnant or breastfeeding, replace doxy with azithromycin 1g PO stat 1 week after initial dose  
 If PID is suspected after a gynaecological or obstetric procedure seek specialist advice

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### PID: additional management

- Avoid intercourse for 1 week following treatment
- Rest and simple analgesia
- Follow up in 2-3 days (prompt resolution supports diagnosis)
- An IUD may be kept in situ if symptoms improve



Remember most PID is sexually transmitted but most STI tests are -ve

- Contact tracing [www.letthemknow.org.au](http://www.letthemknow.org.au)
- Treat current contacts with Azithromycin 1g PO stat (add ceftriaxone if gono likely) irrespective of test results
- Advice on condoms with new partners

Review 1 week after completion of treatment to ensure resolution

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### PID: when symptoms are severe


Arrange TVUS if symptoms fail to improve and/or refer to ED, sexual health physician or gynaecologist

PID features on US are generally non-specific:



- Normal ultrasound
- Fluid in the pouch of Douglas
- Thickening or increased vascularity of the fallopian tubes
- Presence of a tubo-ovarian abscess

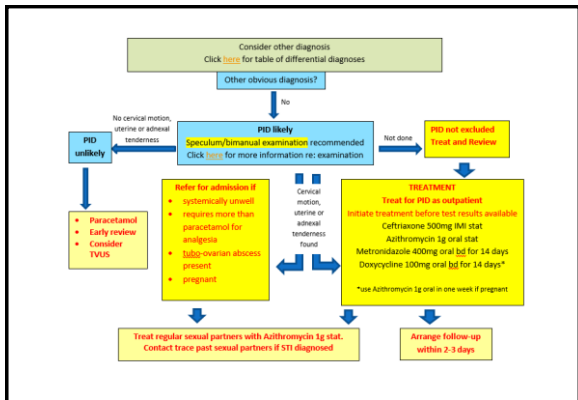
Consider inpatient care/referral if:

- Lack of response to ambulatory therapy
- Clinically severe disease; suspected pelvic/tubo-ovarian abscess; systemically unwell
- Pregnant
- Diagnosis uncertain

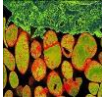


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### Mycoplasma genitalium: an old organism with a new found role




- Associated with NGU, cervicitis, PID and preterm delivery
- ONLY test if symptomatic (or contact with affected partner)
- Diagnosed with a NAAT on an additional endocervical swab (can use HVS or first pass urine)
- Azithromycin 1<sup>st</sup> line treatment but resistance increasing...
- In proven MG PID which does not respond, moxifloxacin recommended in consultation with lab/sexual health clinic (400mg daily for 14 days; private script)
- if still fails, refer to sexual health physician for Mx (pristinamycin; special use application to the TGA)
- Abstinence for 7 days & contact tracing with treatment of partner(s)
- PLUS
- Test of Cure 2-4 weeks after treatment (different to chlamydia!)

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### Take home messages: new onset low abdominal pain



- Perform a pregnancy test for all women of reproductive age
- High index of suspicion for ectopic pregnancy; consider other gynae and surgical causes via history, examination and use of appropriate tests
- Refer to ED if haemodynamically unstable or symptoms are severe
- PID is under-recognised in young women at risk of STIs with serious sequelae if untreated
- Test for chlamydia, gono and mycoplasma genitalium (most tests are negative in PID!)
- Have low threshold for treating PID if no other diagnosis obvious
- Know where to find online resources for yourself and your patients

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### New onset low abdominal pain: resources for clinicians and patients

- www.stipu.nsw.gov.au
- www.stigidelines.org.au
- www.fpns.org.au
- www.shq.org.au
- www.letthemknow.org.au
- www.betterhealth.vic.gov.au
- www.playsafe.health.gov.au
- 3<sup>rd</sup> edition Reproductive and Sexual Health: an Australian Practice Handbook






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### New onset low abdominal pain: background & thanks



- NSW PID Working Group established 2014
- Made up of Senior Sexual Health Physicians, Sexual Health Nurses, Emergency Department CNC, regional and rural GPs & representatives from Emergency Care Institute, Family Planning NSW, RANZCOG, RACGP and NSW STI Programs Unit
- With thanks to Natalie Edmiston, Janet Knox, Chris Bourne, Jo Ludlow & Catriona Bradshaw, Leanne Burton

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### Clinical Education FPAA SRH Certificate Course and ...

- Certificate courses for doctors and nurses
- IUD training
- Clinical updates
- Unplanned pregnancy counselling training



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