New onset low abdominal pain
in women of reproductive age
Dr Deborah Bateson
Medical Director Family Planning NSW
Chair Australasian Sexual Health Alliance
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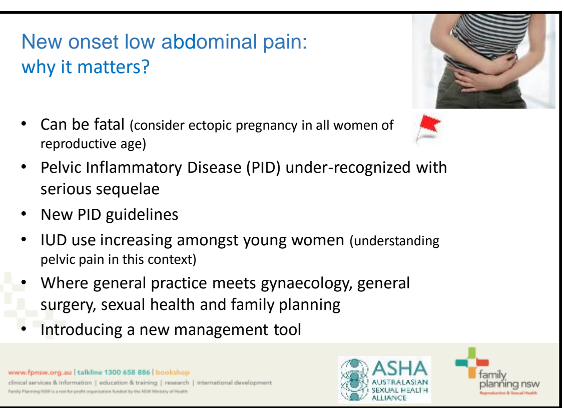
New onset low abdominal pain:
why it matters?
Can be fatal (consider ectopic pregnancy in all women of reproductive age)
Pelvic Inflammatory Disease (PID) under-recognized with serious sequelae
New PID guidelines
IUD use increasing amongst young women (understanding pelvic pain in this context)
Where general practice meets gynaecology, general surgery, sexual health and family planning
Introducing a new management tool
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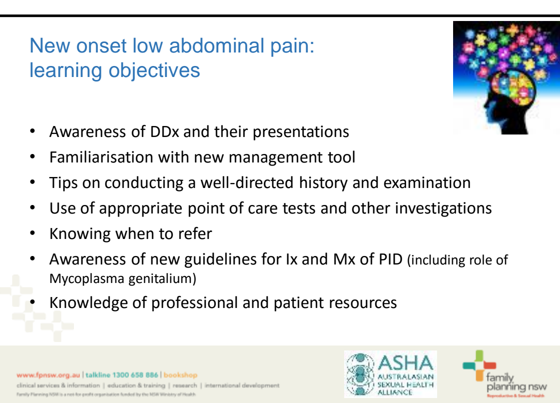
New onset low abdominal pain:
learning objectives
Awareness of DDx and their presentations
Familiarisation with new management tool
Tips on conducting a well-directed history and examination
Use of appropriate point of care tests and other investigations
Knowing when to refer
Awareness of new guidelines for Ix and Mx of PID (including role of Mycoplasma genitalium)
Knowledge of professional and patient resources
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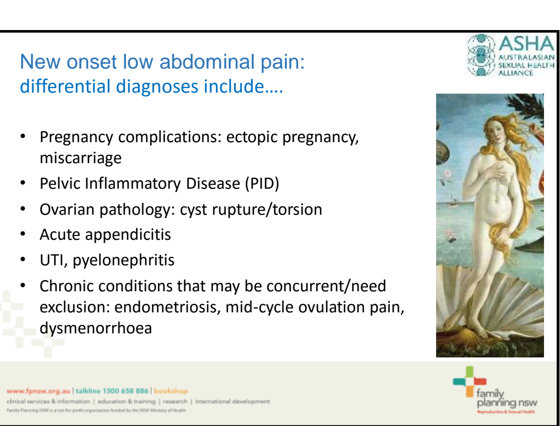
New onset low abdominal pain:
differential diagnoses include….
Pregnancy complications: ectopic pregnancy, miscarriage
Pelvic Inflammatory Disease (PID)
Ovarian pathology: cyst rupture/torsion
Acute appendicitis
UTI, pyelonephritis
Chronic conditions that may be concurrent/need exclusion: endometriosis, mid-cycle ovulation pain, dysmenorrhoea
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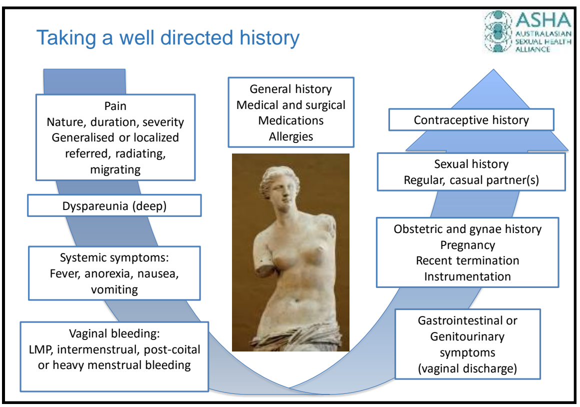
Taking a well directed history
Pain
Nature, duration, severity
Generalised or localized
referred, radiating, migrating
Dyspareunia (deep)
Systemic symptoms:
Fever, anorexia, nausea, vomiting
Vaginal bleeding:
LMP, intermenstrual, post-coital or heavy menstrual bleeding
General history
Medical and surgical
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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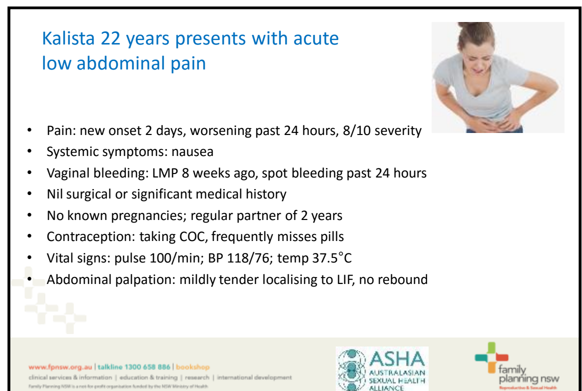
Kalista 22 years presents with acute low abdominal pain
Pain: new onset 2 days, worsening past 24 hours, 8/10 severity
Systemic symptoms: nausea
Vaginal bleeding: LMP 8 weeks ago, spot bleeding past 24 hours
Nil surgical or significant medical history
No known pregnancies; regular partner of 2 years
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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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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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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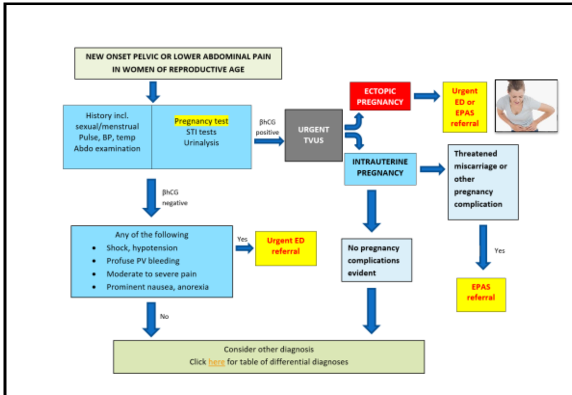
NEW ONSET PELVIC OR LOWER ABDOMINAL PAIN IN WOMEN OF REPRODUCTIVE AGE
History incl. sexual/menstrual
Pulse, BP, temp
Abdo examination
Pregnancy test
STI tests
Urinalysis
βhCG positive
URGENT TVUS
ECTOPIC PREGNANCY
Urgent ED or EPAS referral
INTRAUTERINE PREGNANCY
Threatened miscarriage or other pregnancy complication
Yes
EPAS referral
No pregnancy complications evident
βhCG negative
Any of the following
Shock, hypotension
Profuse PV bleeding
Moderate to severe pain
Prominent nausea, anorexia
Yes
Urgent ED referral
No
Consider other diagnosis
Click here for table of differential diagnoses

Tahlia, 24 years presents with
low abdominal pain
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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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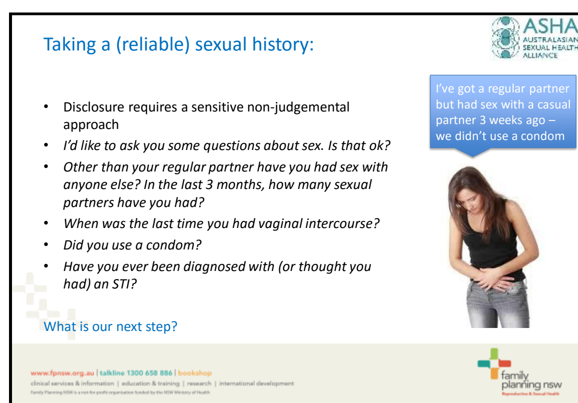
Taking a (reliable) sexual history:
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Disclosure requires a sensitive non-judgemental approach
I'd like to ask you some questions about sex. Is that ok?
Other than your regular partner have you had sex with anyone else? In the last 3 months, how many 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?
I've got a regular partner but had sex with a casual partner 3 weeks ago – we didn't use a condom
What is our next step?
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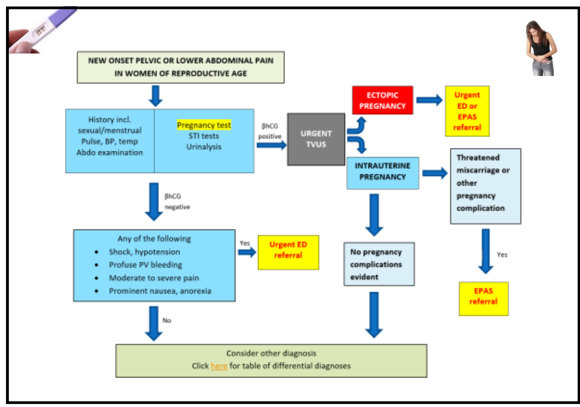
NEW ONSET PELVIC OR LOWER ABDOMINAL PAIN IN WOMEN OF REPRODUCTIVE AGE
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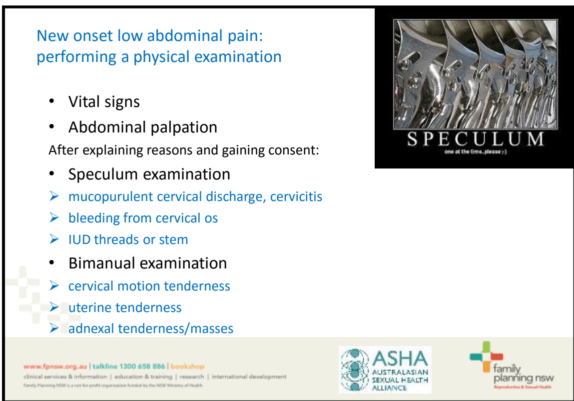
New onset low abdominal pain:
performing a physical examination
• Vital signs
• Abdominal palpation
After explaining reasons and gaining consent:
• Speculum examination
➢ mucopurulent cervical discharge, cervicitis
➢ bleeding from cervical os
➢ IUD threads or stem
• Bimanual examination
➢ cervical motion tenderness
➢ uterine tenderness
➢ adnexal tenderness/masses
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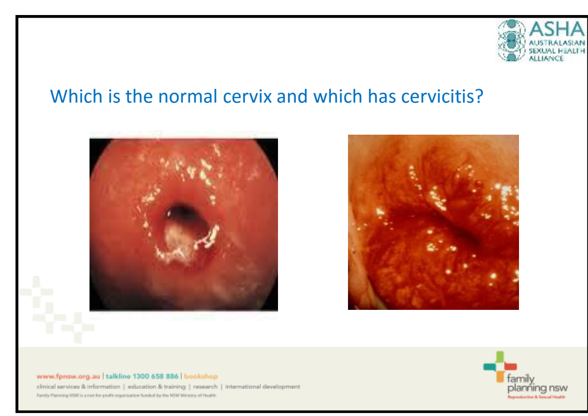
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Which is the normal cervix and which has cervicitis?
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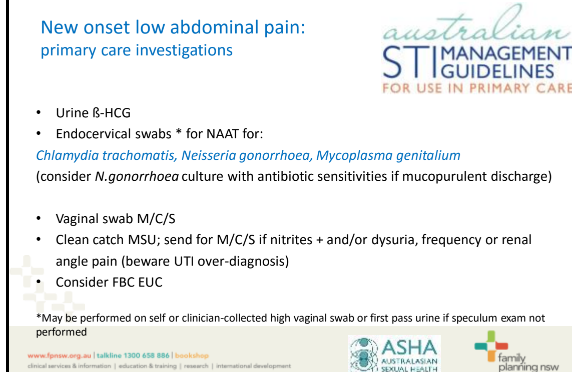
New onset low abdominal pain:
primary care investigations
australian
STI MANAGEMENT GUIDELINES
FOR USE IN PRIMARY CARE
• Urine ß-HCG
• Endocervical swabs * for NAAT for:
Chlamydia trachomatis, Neisseria gonorrhoea, Mycoplasma genitalium
(consider N.gonorrhoea culture with antibiotic sensitivities if 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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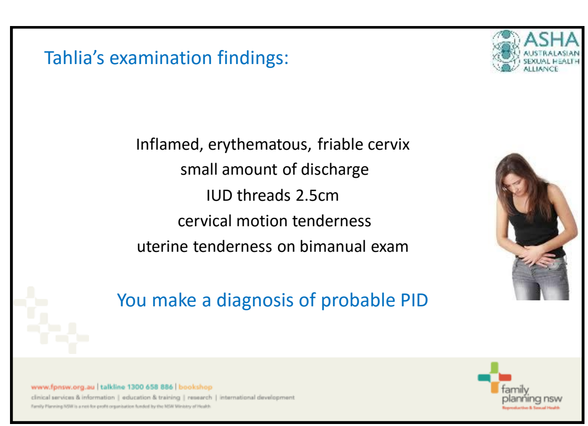
Tahlia's examination findings:
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Inflamed, erythematous, friable cervix
small amount of discharge
IUD threads 2.5cm
cervical motion tenderness
uterine tenderness on bimanual exam
You make a diagnosis of probable PID
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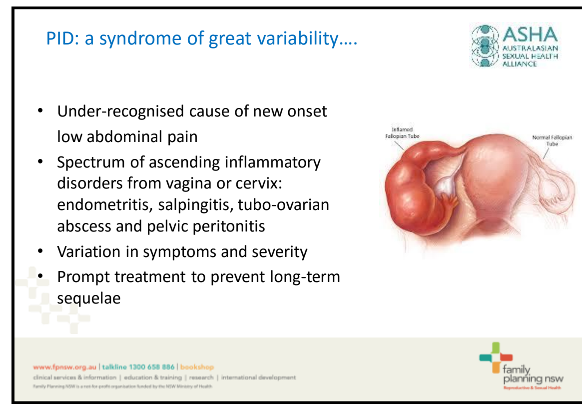
PID: a syndrome of great variability….
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• Under-recognised cause of new onset low abdominal pain
• Spectrum of ascending inflammatory disorders from vagina or cervix: endometritis, salpingitis, tubo-ovarian abscess and pelvic peritonitis
• Variation in symptoms and severity
• Prompt treatment to prevent long-term sequelae
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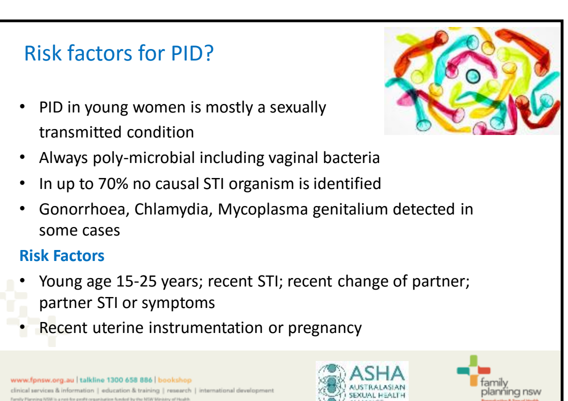
Risk factors for PID?
• PID in young women is mostly a sexually transmitted condition
• Always poly-microbial including vaginal bacteria
• In up to 70% no causal STI organism is identified
• Gonorrhoea, Chlamydia, Mycoplasma genitalium detected in some cases
Risk Factors
• Young age 15-25 years; recent STI; recent change of partner; partner STI or symptoms
• Recent uterine instrumentation or pregnancy
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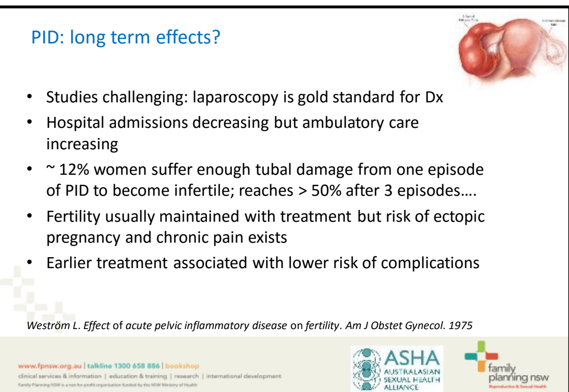
PID: long term effects?
Studies challenging: laparoscopy is gold standard for Dx
Hospital admissions decreasing but ambulatory care increasing
~ 12% women suffer enough tubal damage from one episode of PID to become infertile; reaches > 50% after 3 episodes….
Fertility usually maintained with treatment 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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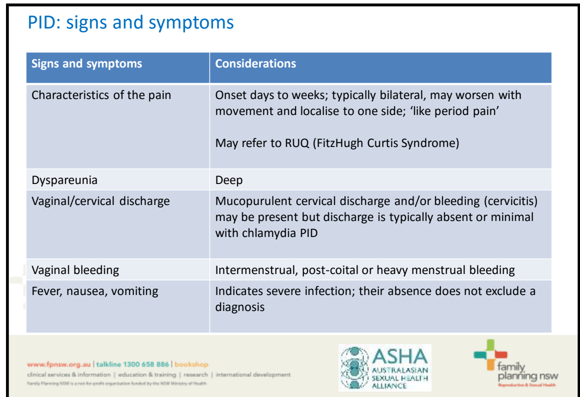
PID: signs and symptoms
Signs and symptoms
Considerations
Characteristics of the pain
Onset days to weeks; typically bilateral, may worsen with movement and localise to one side; 'like period pain'
May refer to RUQ (FitzHugh Curtis Syndrome)
Dyspareunia
Deep
Vaginal/cervical discharge
Mucopurulent cervical 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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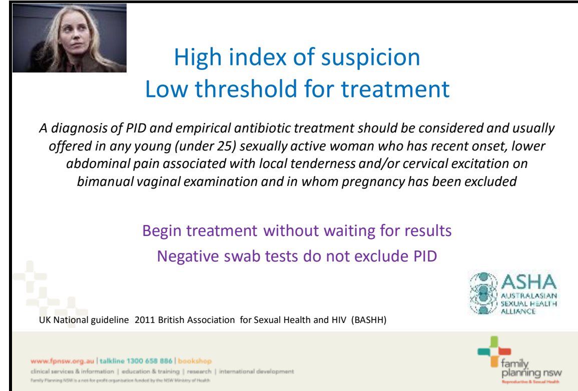
High index of suspicion
Low threshold for treatment
A diagnosis of PID and empirical antibiotic treatment should be considered and usually offered in any young (under 25) sexually active woman who has recent onset, lower abdominal pain associated with local tenderness and/or cervical excitation on bimanual 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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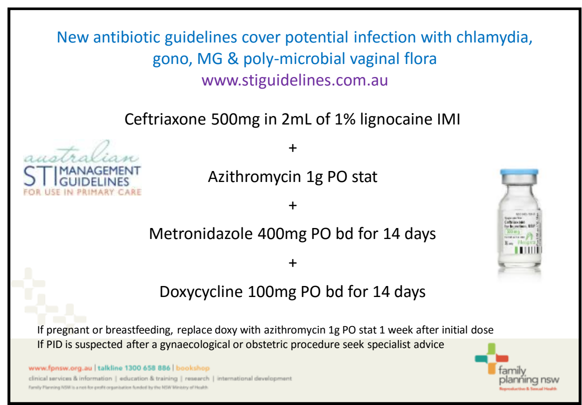
New antibiotic guidelines cover potential infection with chlamydia, gono, MG & poly-microbial vaginal flora
www.stiguidelines.com.au
Ceftriaxone 500mg in 2mL of 1% lignocaine IMI
+
Azithromycin 1g PO stat
+
Metronidazole 400mg PO bd for 14 days
+
Doxycycline 100mg PO bd for 14 days
australian STI MANAGEMENT GUIDELINES FOR USE IN PRIMARY CARE
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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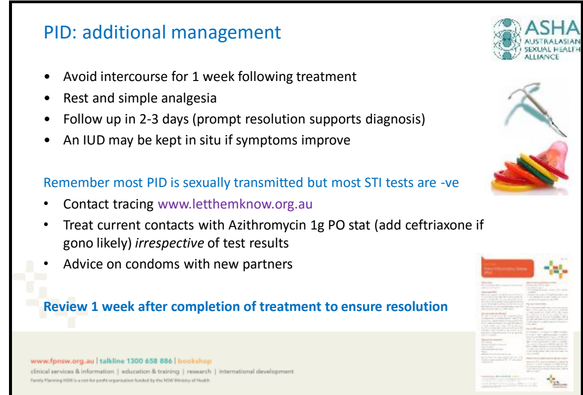
PID: additional management
Avoid intercourse for 1 week following treatment
Rest and simple analgesia
Follow up in 2-3 days (prompt resolution supports diagnosis)
An IUD may be kept in situ if symptoms improve
Remember most PID is sexually transmitted but most STI tests are -ve
Contact tracing www.letthemknow.org.au
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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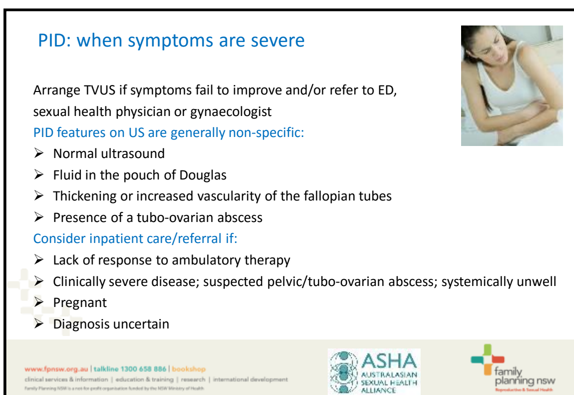
PID: when symptoms are severe
Arrange TVUS if symptoms fail to improve and/or refer to ED, sexual health physician or gynaecologist
PID features on US are generally non-specific:
Normal ultrasound
Fluid in the pouch of Douglas
Thickening or increased vascularity of the fallopian tubes
Presence of a tubo-ovarian 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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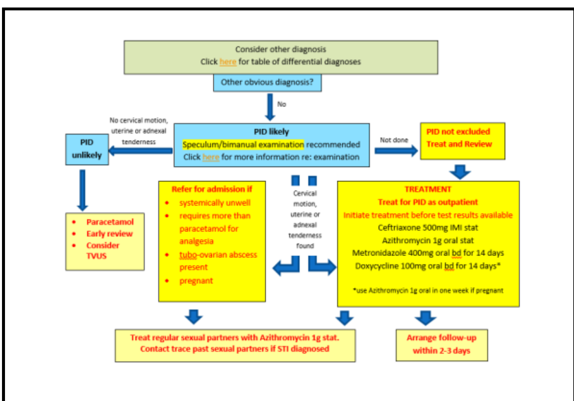
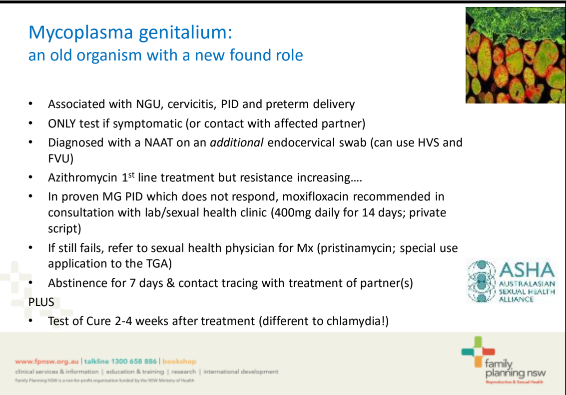


Consider other diagnosis
Click here for table of differential diagnoses
Other obvious diagnosis?
No
No cervical motion, uterine or adnexal tenderness
PID unlikely
PID likely
Speculum/bimanual examination recommended
Click here for more information re: examination
Not done
PID not excluded
Treat and Review
Paracetamol
Early review
Consider TVUS
Refer for admission if
systemically unwell
requires more than paracetamol for analgesia
tubo-ovarian abscess present
pregnant
Cervical motion, uterine or adnexal tenderness found
TREATMENT
Treat for PID as outpatient
Initiate treatment before test results available
Ceftriaxone 500mg IMI stat
Azithromycin 1g oral stat
Metronidazole 400mg oral bd for 14 days
Doxycycline 100mg oral bd for 14 days*
*use Azithromycin 1g oral in one week if pregnant
Treat regular sexual partners with Azithromycin 1g stat.
Contact trace past sexual partners if STI diagnosed
Arrange follow-up within 2-3 days



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 and FVU)
Azithromycin 1st 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
www.fpnsw.org.au | talkline 1300 658 886 | bookshop
clinical services & information | education & training | research | international development
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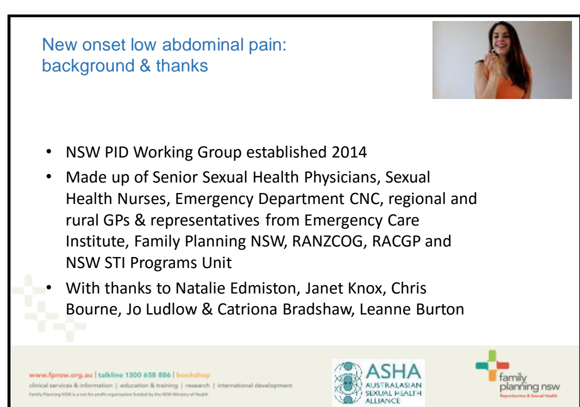
New onset low abdominal pain:
resources for clinicians and patients
www.stipu.nsw.gov.au
www.stiguidelines.org.au
www.fpnsw.org.au
www.letthemknow.org.au
www.playsafe.health.gov.au
3rd edition Reproductive and Sexual Health: an Australian Practice Handbook
Play Safe
australian STI MANAGEMENT GUIDELINES
FOR USE IN PRIMARY CARE
REPRODUCTIVE & SEXUAL HEALTH



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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