

## PELVIC INFLAMMATORY DISEASE (PID)

PID is a leading risk factor for adverse reproductive health sequelae including tubal factor infertility, ectopic pregnancy, and chronic pelvic pain. Family PACT clinicians should consistently utilize Centers for Disease Control and Prevention (CDC)-recommended diagnostic criteria and treatment regimens.

### KEY POINTS

- The clinical diagnosis of acute PID is imprecise. Many women with PID have subtle or mild symptoms and many episodes of PID go unrecognized. Although some women are asymptomatic, others are not diagnosed because the patient or provider fails to recognize mild or nonspecific symptoms or signs, such as abnormal bleeding, dyspareunia, and vaginal discharge.
- Treatment regimens for PID are designed to cover chlamydia (Ct), gonorrhea (GC), anaerobes, and organisms causing bacterial vaginosis (BV). Antibiotic regimens recommended by the CDC (listed below) are considered first line therapy.
- A minimum of two follow-up visits are necessary to evaluate response to antibiotic therapy.

## QUESTIONS AND ANSWERS

### What are the risk factors for the acquisition of PID?

- PID is seen more commonly in younger women (particularly adolescents), and those with a history of Ct or GC infection, prior episodes of PID, or multiple sex partners. Cigarette smoking, vaginal douching, and BV also are associated with PID.
- PID is less likely in women who are older, in a mutually monogamous sexual relationship with a partner not known to have other partners, have sex only with women, use barrier contraceptives or oral contraceptives, or have had a tubal sterilization.
- Women who use intrauterine contraceptives (IUCs) have increased risk of PID for the first three weeks after insertion. Afterwards, the risk of PID in IUC users is the same as in the general population.

### What are the criteria for the diagnosis of PID?

For women who present with pelvic or lower abdominal pain, the CDC specifies “minimum” diagnostic criteria for uncomplicated PID, which include cervical motion tenderness *OR* uterine tenderness *OR* adnexal tenderness.

The following additional criteria can be used to enhance the specificity of the minimum criteria and to support a diagnosis of PID:

- Oral temperature >101°F (>38.3°C)
- Abnormal cervical or vaginal mucopurulent discharge
- Elevated erythrocyte sedimentation rate (ESR)
- Laboratory documentation of cervical infection with Ct or GC
- Presence of abundant numbers of white blood cells on saline microscopy of vaginal secretions (evaluation of vaginal fluid also offers the ability to detect concomitant infections, such as bacterial vaginosis and trichomoniasis)

### Which diagnostic tests should be performed routinely in the evaluation of a client for PID?

At a minimum, temperature measurement, abdominal and bimanual pelvic exam, and testing for Ct and GC should be performed. Family PACT benefits available for the diagnosis of PID include complete blood count with differential, ESR, saline microscopy of vaginal secretions, and pregnancy testing. Additional tests, such as pelvic ultrasound, may be clinically indicated but are not program benefits.

### Which issues impact the design of PID treatment regimens?

The objective of early, aggressive treatment of PID is to avoid the need for hospitalization, prevent complications such as tubo-ovarian abscess, and reduce the risk of tubal infertility and ectopic pregnancy. All treatment regimens must be effective against Ct and GC; however, negative screening tests for these organisms do not rule out upper tract infection. The addition of metronidazole should be considered, as it will improve the antibiotic coverage of the anaerobic organisms that are present in the majority of PID cases. Metronidazole also will treat BV, which frequently is associated with PID.

### What is the antibiotic regimen recommended by the CDC for out-patient treatment of PID?

- Ceftriaxone 250 mg IM in a single dose *OR* cefoxitin 2 grams IM in a single dose and probenecid, 1 gram orally
- *PLUS* doxycycline 100 mg orally twice a day for 14 days
- With or without metronidazole 500 mg orally twice a day for 14 days

### What additional regimen is acceptable according the *California Sexually Transmitted Diseases (STD) Treatment Guidelines*?

- Levofloxacin 500 mg orally once daily for 14 days *OR* ofloxacin 400 mg orally twice daily for 14 days (refer to the Family PACT *Policies, Procedures, and Billing Instructions* [PPBI] for a list of approved drugs)
- With or without metronidazole 500 mg orally twice a day for 14 days

### What about the possibility of fluoroquinolone-resistant GC?

According to 2007 California *STD Treatment Guidelines*, quinolones may be used for PID if the risk of GC is low, a Nucleic Acid Amplification Test (NAAT) test for GC is performed, and follow-up of the patient is considered likely. If GC is documented, a test of cure using bacterial culture (on which susceptibility testing can be performed) should be performed and the patient should be retreated with the recommended ceftriaxone and doxycycline regimen.

### How should a client diagnosed with PID and who uses an IUC be managed?

No evidence suggests that IUCs should be removed in women diagnosed with acute PID. However, if the client does not respond promptly to antibiotic treatment, the IUC should be removed and antibiotics continued.

## PELVIC INFLAMMATORY DISEASE (CONT.)

### (When should a woman be referred for hospitalization\*\* for PID?)

- Surgical emergencies (e.g., appendicitis) cannot be excluded
- The patient is pregnant (owing to the risk of septic abortion)
- The patient does not respond clinically to oral antimicrobial therapy
- The patient is unable to follow or tolerate an outpatient oral regimen
- The patient has severe illness, nausea and vomiting, or high fever
- The patient has a tubo-ovarian abscess
- The decision to hospitalize\*\* adolescents with acute PID should be based on the same criteria used for older women

### What is appropriate follow-up after a woman receives outpatient treatment for PID?

- Schedule first follow-up visit in 48-72 hours. Refer for hospitalization\*\* for intravenous antibiotic therapy if:
  - The client's pelvic pain is the same or worse
  - She is unable to ingest medication
  - A pelvic or adnexal mass has developed since the initial exam
- Examine 4-7 days after completion of treatment. Refer for hospitalization\*\* for additional diagnostic tests or treatment if:
  - A pelvic or adnexal mass has developed since the initial exam
  - Moderate or severe tenderness persists after adequate treatment
- When notifying the client of positive test result, request that a client "bring your own partner (BYOP)" into clinic so that both can be treated at the same visit.
- Male sex partners during the 60 days preceding the patient's onset of PID diagnosis should be treated for both Ct and GC.
- In women with laboratory confirmed Ct or GC infection, rescreen for reinfection three months after therapy is complete.

### What other counseling points are important for women diagnosed with PID?

- Review adverse effects of drugs to be prescribed and emphasize the importance of completing the entire course of medication.
- Identify and discuss potential medication compliance problems.
- Review purpose and importance of follow up exam.
- Advise to avoid intercourse until treatment is completed; if symptoms recur after completion of treatment, avoid intercourse, seek re-evaluation.
- Provide sexually transmitted infection/human immunodeficiency virus (STI/HIV) risk-reduction counseling and education. In addition to an effective contraceptive for pregnancy prevention, recommend using a barrier contraceptive to avoid future infection.

## APPLICATION OF FAMILY PACT STANDARDS

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#### 1. Informed Consent

- Clients shall be advised of the availability of STI prevention and STI and PID management services including education and counseling, testing and treatment.
- An individual age 12 years and older can consent for STI and PID treatment.

#### 2. Confidentiality

- California law mandates reporting of PID and positive Ct and GC results to the local health jurisdiction for prevention, control and contact management. Client information shall be reported on the Confidential Morbidity Report within seven days of identification.

#### 3. Access to Care:

- Laboratory testing for HIV, and laboratory testing and drugs for STI and PID treatment shall be available at the site of clinical services or by referral to Medi-Cal laboratories and pharmacies.

#### 4. Availability of Covered Services

- Screening and testing for HIV, and screening, testing and treatment for STIs and PID as listed in the Family PACT PPBI shall be made available to clients as a condition of delivering services under Family PACT.

#### 5. Clinical and Preventive Services

- STI and PID prevention and management services shall be consistent with current California STD Control Branch and CDC *STD Treatment Guidelines* and recognized medical practice standards.
- All women who are diagnosed with acute PID should be tested for Ct and GC and should be screened for HIV infection.
- All sex partners in the last 60 days of women diagnosed with PID should be tested and empirically treated at the time of the visit before the test result is available.

#### 6. Education and Counseling Services

- Client-centered prevention and STI & HIV risk-reduction counseling and education shall be provided.

## PROGRAM POLICY

This alert provides an interpretation of the Family PACT Standards regarding care of adolescent clients: Providers should refer to the Family PACT PPBI for the complete text of the Family PACT Standards, official administrative practices, and billing information. For the purposes of this and other Family PACT Clinical Practice Alerts, the term "shall" indicates a program requirement; the term "should" is advisory and not required.

## RESOURCES FOR INFORMATION ON (SUBJECT)

- CDC, Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006;55(No. RR-11):56-61. May be accessed at <http://www.cdc.gov/std/treatment/2006/rr5511.pdf>
- California STD Treatment Guidelines Table For Adults & Adolescents 2007. May accessed at: <http://www.cdph.ca.gov/healthinfo/discond/documents/std-treatment-guidelines-summary-nov-2007.pdf>

\*\* *Inpatient treatment of PID is not a Family PACT benefit*