Pelvic Inflammatory Disease (PID)

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Introduction
In our daily practice the incidence of PID is very high approximately 1 in 5 patients. So it is very important to diagnose a case of PID and treat her appropriately. And we know that PID is a disease of the women which makes her life hazardous miserable. For the suffering of the women, who is the candle of the whole family, all the members of the family suffers most.

Risk Factors of PID
In some study was assessed that the risk factors of PID are namely, use of intrauterine device, sexual activity with multiple partners, history of previous PID, history of minor gynecological operation, after age at menarche (>or = 14 years), history of stillbirth and no previous pregnancy, history of tuberculosis, history of previous laparoscopy.

Incidence of PID is increased three to nine fold in IUD users compared to nonusers. More recent studies indicate that PID among IUD users is strongly related to the insertion process and to background risk of STD.

Pathogenesis of PID
Multiple microorganisms can cause PID but the most important causative organisms are Chlamydia trachomatis, Neisseria gonorrhrea, and microorganisms associated with bacterial vaginosis. PID results most frequently from the ascent of these infections from cervix to the upper genital tract. The importance of cervical chlamydial infection in the pathogenesis of PID is well recognized.

Clinical Spectrum of PID
The clinical spectrum of PID ranges from subclinical endometritis to severe salpingitis, pyosalpinx, tubo-ovarian abscess, pelvic peritonitis, and peri-hepatitis. Diagnostic difficulties are compound by the wide variety of clinical presentations and insensitivity and poor specificity of laboratory tests. Better recognition of mild and atypical disease needs a high index of suspicion whenever young, sexually active women present with gynecological symptoms. Statistics suggest that adolescents have a significantly higher rate of PID than does any other age group. Even symptomatic and minimally symptomatic PID can lead to adhesion, infertility and ectopic pregnancy. So clinicians should maintain a high index of suspicion when evaluating female adolescents with lower abdominal pain.

Estrogen-Progestogen contraception (OC) is significantly associated with the high prevalence of chlamydia trachomatis in the lower genital tracts of young women. In contrast PID is frequent and is associated with milder pelvic lesions in OC users than in non-users. A recent study suggests that OC use can be associated with silent endometritis and salpingities. Thus OC masks symptoms of Chlamydial PID.

Chlamydial infection: Microscopic View.

Diagnosis of PID
Clinical diagnosis of PID has limitations. The clinical diagnostic criteria are insensitive and nonspecific. False- positive and false-negative diagnosis is common; however, direct visual diagnosis is not always feasible, requires...
general anesthesia, and is costly. For detection of microorganism, high vaginal swabs or aspiration from pouch of Douglas can be done. Laparoscopy and Trans vaginal sonography is done. Uterine sonographic findings may demonstrate free fluid in the cul-de-sac, ovarian enlargement, tubular adnexal structure or it may presents a complex nature. C-reactive protein concentrations and ESR values correlated positively with the sonologically determined volumes of pyosalphinx /pyoovaries, cul-de-sac fluid and ovaries.

**Management of PID**

A study demonstrated that clinical cure rate was 97% in the clindamycin and ciprofloxacin group and 95% in the ceftriaxone and doxycycline group in the treatment of mild to moderate PID. Side effects were similar in both groups. Triple-antibiotic therapy with ampicillin plus clindamycin plus gentamycine is the treatment of choice in women with tubo-ovarian abscess. Partner notification is an essential part of management if the PID is due to the infection of sexually transmitted organism.

In resistant and chronic cases where the medical treatment fail the surgical treatment is the answer. That is total abdominal hysterectomy and bilateral salpingo-ophorectomy and removal of parametrial tissue as far as practicable. Here it is to be noted that the ovaries if healthy to be preserved when the patient is young (< 40 years). The idea is to preserve the hormonal function of the ovaries. In other cases after operation, Hormone Replacement Therapy to be prescribed.

**Prevention of PID**

Certain reproductive behaviors could be targeted for public health attention and risk reduction interventions to reduce the incidence of PID. These include, limiting number of sexual partners and encouraging the use of barrier methods of contraception for STD prevention. Another thing is that it is probably best to avoid sexual intercourse during menstruation.

**References**

9. Sex- Transm-Dis. 1996 May-Jun;23(3);239-47