Evaluation of Chlamydia Infection

Epidemiology

Chlamydia is a public health concern due to its high prevalence, potential for long term complications and the silent nature of some infections. Early detection, rapid treatment, and prevention strategies are essential in reducing the burden of chlamydia and promoting sexual health.

Chlamydia is one the most prevalent bacterial STIs. It affects both men and women, but young adults and adolescents are at higher risk. Many cases of chlamydia go undiagnosed due to asymptomatic infections. It can cause permanent damage to a woman's reproductive system which can make it difficult or impossible to get pregnant. Chlamydia can cause a potentially fatal ectopic pregnancy.



Transmission

Chlamydia is primarily transmitted through sexual contact, such as vaginal, anal and oral, without the use of a condom with a partner who is infected with chlamydia. Sexually active young people are at a higher risk of getting chlamydia due to behaviors and biological factors common among young people. Gay or bisexual men are also at risk since chlamydia can spread through oral and anal sex. Chlamydia can also be transmitted from mother to child during childbirth, leading to neonatal chlamydial infection causing blindness or pneumonia in the infant.

Treatment of Chlamydia Infection

Clinical Manifestations

Chlamydia infections can be asymptomatic in up to 70% of women and 50% of men. When symptoms do occur, they may include abnormal vaginal discharge, painful urination, pelvic pain, testicular pain or rectal pain. Untreated chlamydia can lead to serious complications such as pelvic inflammatory disease, infertility, ectopic pregnancy, and chronic pelvic pain. Untreated chlamydia infection can cause scar tissue in the fallopian tubes which causes a blockage leading to infertility. Untreated chlamydia can also cause long term pelvic and abdominal pain and may increase your chances of getting or giving HIV.

Diagnosis

Laboratory testing is essential for diagnosing chlamydia. For women, urogenital infection can be diagnosed by vaginal or cervical swabs or first void urine. For men, urethral infection can be diagnosed by testing first void urine or urethral swab. Nucleic acid amplification tests (NAATs) are highly sensitive and specific and are the recommended method for detection. Samples for testing can be obtained from urine, vaginal swabs (women), urethral swabs (men), or rectal swabs (if indicated).

Treatment

Chlamydia can be easily cured with antibiotics. HIV positive persons with chlamydia should receive the same treatment as those who are HIV negative. Chlamydia is typically treated with doxycycline 100 mg taken twice daily for 7 days or azithromycin 1 gram taken as a single dose. Persons with chlamydia should refrain from sexual activity for 7 days after medication administration and resolution of symptoms if present. To minimize the risk for reinfection, it is necessary to refrain from sexual activity until all partners are treated. The antibiotic medication will stop the infection, but it will not repair any permanent damage done by the disease. Because repeat chlamydia infection is common, sexual partners should also be treated to prevent reinfection. Women and men with chlamydia should be retested about 4 weeks after treatment of initial infection, regardless of whether they believe that their partners were successfully treated.

Prevention

Consistent and correct use of condoms during sexual intercourse can reduce the risk of chlamydia transmission. Regular screening is important, especially for sexually active individuals under the age of 25 years of at high risk. Education about safe sexual practices and risk reduction is crucial in preventing chlamydia and other STIs