Sexually Transmitted Vaginal Infections

Chlamydia

Chlamydia trachomatis is a parasite bacterium. There are 15 known immunotypes of C. trachomatis that are responsible for neonatal infections, for adult ocular and genital infections. Diagnosis is done through culture. Often when gonorrhea is present, chlamydia is also present.

Infection is often asymptomatic although eventually pelvic inflammatory disease, infertility, or ectopic pregnancy may occur. Dysuria or painful intercourse may occur.

Fetal or neonatal effects are common. Stillbirth and neonatal death are 10 times more common than in noninfected women. Conjunctivitis occurs in one third of exposed newborns. About 25% of newborns contract pneumonia.

The preferred treatment is with tetracycline. Neonatal prophylaxis is achieved with erythromycin ophthalmic ointment.

Gonorrhea

Gonorrhea is an acute infectious disease of the epithelium of the urethra, cervix, and rectum. The causative organism is Neisseria gonorrhoeae. Infection is spread by direct contact with infect lesions and indirectly by transfer from inanimate objects, such as towels, bed linens, and clothing.

Women and men are often asymptomatic for weeks or months. In men the incubation period is from 2 to 14 days. In women symptoms usually begin within 7 to 21 days.

Symptoms in men include:

- Tingling sensation in the urethra followed a few hours later by dysuria and a purulent discharge
- Frequency and urgency of micturition develop as the disease spreads to the posterior urethra.
- Purulent, yellowish-green discharge from the urethra
- Red and swollen meatus.

In women symptoms include:

- Dysuria and frequency
- Vaginal discharge
- The cervix may be reddened and friable with purulent discharge.
- Pus may be expresses from the urethra on pressure against thesymphysis pubis or from the Skene's ducts or Bartholin's glands.

Rectal gonorrhea is usually asymptomatic, but rectal discharge may occur. Gonococcal pharygitis may be asymptomatic , but some patients complain of a sore throat and discomfort on swallowing.

Diagnosis is done by performing a culture.

The most common complication in women is pelvic inflammatory disease.

The main complication for the newborn is ocular infection. Ophthalmitis with partial or total blindness may occur. Exposed newborns are at risk for infection other places such as the nose, pharynx, ears, vagina, and anus. Erythromycin ophthalmic ointment is effect against gonococcal ophtalmia neonatorium.

The Center for Disease Control recommends one of the following treatments:
1) Penicillin G 4.8 million u. IM plus probenecid 1 gm orally given simultaneously.
2) Ampicillin 3.5 gm o or amoxicillin 3.0 gm orally given simultaneously with probenecid 1 gm
3) Tetracycline 500 mg orally qid for 5 days.
Patients should abstain from sexual activity until cure is confirmed.

Syphilis

Syphilis is a contagious systemic disease caused by the spirochete Treponema Palidum. It is characterized by periods of active manifestations and by years of asymptomatic latency. It can affect any tissue or vascular organ of the body and can be passed form mother to fetus (congenital syphilis). It can be transmitted by sexual contact, kissing, or close bodily contact. The incubation time can be from 1 to 13 weeks, but is usually from 3 to 4 weeks.

Primary syphillis: the primary lesion or chancre generally appears within 4 weeks of infection and heals within 4 to 8 weeks in untreated patients. It develops as a red papule that erodes and forms a painless ulcer. Primary chancres occur on the penis, anus, and rectum in men, the vulva, cervix, and perineum in women. They may be found on the lips, tongue, tonsils or fingers also.

Secondary syphillis: Cutaneous rashes appear within 6 to 12 weeks after infection. This nontender rash may appear anywhere over the body. Systemic infection causes malaise, anorexia, fever, each and generalized lyphadenopathy. This stage clears without treatment in 2 to 6 weeks.

Latent syphillis: Latent stages appear at varying times. This stage may last a lifetime, during which there is not outward evidence of disease. Lesions reappear a during this time.

Tertiary syphillis: During this stage there is clinical evidence of disease throughout the body. There is bone, cardiac and neurologic disease.

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Primary and secondary stages of untreated syphillis lead to stillbirth. Latent and tertiary stages of untreated syphilis lead to congenital syphilis in the newborn.

Penicillin is the treatment of choice form syphilis. In penicillin-allergic persons tetracycline or erthromycin may be sued. Tetracycline is contraindicated in pregnancy.

Trichomoniasis

Trichomonas vaginalis is a protozoan that thrives in an alkaline environment. Trichomoniasis is prevalent in approximately 30% of sexually active women. About half to two-thirds of these women will have symptoms. Between 60% and 90% of male partners may be asymptomatic. In women who are asymptomatic, infection may be detected during a routine exam or Pap smear. Most infections are transmitted by sexual contact. Transmission by shared bath facilities, wet towels, or wet swimsuits is also possible.

Symptoms include:

* 75% of infected women report a vaginal discharge that is malodorous.
* Profuse, frothy, gray, yellow-white, or yellow-green, foul smelling discharge
* Irritated vulva or cervix with edema ("strawberry vagina")
* May cause red petechiae in the vagina
* Pruritus
* Urinary frequency, painful urination
* Lower abdominal pain
* Painful intercourse

Complications include discomfort for the mother, preterm labor, low birth weight babies, premature rupture of membranes, and fever and irritability in the baby (before and/or after birth).

The preferred medical treatment is metronidazone. It can not administered in the first trimester. Trichomonas cannot live in an acidic environment. Natural cures consist of acidifying the environment. Male sexual partners may harbor T.vaginalis in the urinary tract and need to be treated also so reinfection does not occur.

Genital Herpes

Genital herpes is caused by the herpes virus Type 2. It is moderately contagious and is usually spread by sexual contact. Lesions develop 4 to 7 days after contact. Itching and soreness usually precede a small patch of erythema. A small group of vesicles develops and then erode becoming circular ulcers. The ulcers become crusted after a few days and usually heal in about 10 days with scarring. the ulcers are usually painful.

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There is no cure for genital herpes. Acyclovir has been used to help treat herpes and to prevent outbreaks. Acetaminophen may be given for fever and discomfort. Lesions should be kept clean. Sexual contact should be avoided during outbreaks. Recommended herbs topically include: Myrrh Gum, Calendula, Yerba Manza & Yellow Dock. Tea tree oil helps the lesions to heal quickly and also helps with pain.

Fetal and neonatal effects are serious. Therefore during an outbreak of active genital herpes, a ceasarean section is done to prevent infection in the baby. Microcephaly, mental retardation, retinal dysplasia, patent ductus arteriosus, and intracranial calcification occur. Signs include lethargy, poor feeding, jaundice, pneumonia, convulsions, bulging fontanelles, and mouth lesions. Neonatal infection with disseminated disease results in 82% mortality.

Genital Warts (Human Papillomavirus-HPV)

Genital warts have an incubation period of 1 to 6 months. They occur most commonly on warm moist surfaces. The appear as soft moist, minute, pink or red swellings that row rapidly. Several of them usually may be found in the same area, producing a cauliflower appearance. During pregnancy they may grow more rapidly and disseminate.

They may be removed by electrocauterization or freezing with a cryoprobe. They may also be treated by application of 25% podophyllum. Application must be made with great care to avoid damaging the surrounding healthy tissue. Systemic toxicity and fetal death have occurred after intravaginal application during pregnancy and it should not be used during pregnancy.

The primary effect of HPV infection in the newborn is respiratory or laryngeal papillomatosis. The exact route of perinatal transmission is unknown because some infants born by cesarean have developed respiratory papillomatosis. The estimated risk of an infant developing papillomatosis after vaginal birth in a mother with active condyloma is 1/400.

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