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# **THE SEXUALLY TRANSMITTED DISEASES MANUAL**

**Includes color photos of most diseases!**

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5TH EDITION

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All corrections, comments, and suggestions that are sent to us will be welcomed.

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blood test for syphilis, and a culture for gonorrhea. Those persons with possible STDs involving areas other than the penis or vagina (such as anal or throat gonorrhea) should have appropriate studies of those areas. Don't be afraid or embarrassed to tell your doctor if you engage in orogenital and/or anal sex. Such information will be very useful in the evaluation and treatment of a STD. Your doctor has no interest in your sexual activities other than for information to use in deciding the appropriate evaluation and treatment program for you. Don't lie or hide information from your doctor. If you are afraid or embarrassed to confide in your doctor, not only concerning STDs but in any medically related matter, then you should find a doctor with whom you can discuss such matters.

The best treatment of a disease is prevention. Since refraining from sexual contact is possibly the only sure way of preventing STDs, protective measures would seem to be a more practical approach. Protective measures are not birth control pills or the IUD. These are measures to protect against unwanted pregnancy. They are not for protection against infections. Spermicides, condoms, diaphragms, and the contraceptive sponge all provide some degree of protection from STDs. Birth control foam and other spermicidal agents offer a protective effect against many of the STDs. Spermicides containing nonoxynol-9 have been found to kill the AIDS virus and help reduce the transmission of AIDS. Spermicides and condoms are available in pharmacies and do not require a prescription. The use of spermicides with a condom and/or a diaphragm further reduces the risk of STD. The diaphragm reduces the risk of STD, pelvic inflammatory disease (PID), and cervical cancer (uterus) The vaginal sponge (trade name: Today) contains nonoxynol-9 and also reduces the risk of STD. The condom offers a high degree of protection. With the increase use of birth control pills, the use of condoms has decreased. Condom use is not only for birth control but will greatly reduce the spread of STDs. A condom (also referred to as a "rubber") is simply a thin sheath that is placed over the erect penis to prevent direct skin to skin contact during sexual contact. This not only keeps the semen/sperm inside the protective sheath but it also prevents infectious material from either sexual partner from reaching the other sexual partner. Most condoms are made of latex rubber, but there is also a type called lambskins which are made of lamb intestines. There are a wide variety of condoms: with or without lubrication, with or without spermicides, ribbed or smooth, reservoir end ( extra space to hold the sperm) or plain end, and various sizes, colors, contours, and thinness. Condoms are not absolutely protective. They are about 98% effective when used correctly. Never use petroleum jelly for lubrication as this

can damage the condom. Always put the condom on gently being careful not to tear it. Remove air bubbles as the condom is completely rolled on (and not pulled on) to the bottom of the penis. Leave a small empty space at the end of the condom (the tip of the penis) to hold the semen. Condoms are available that have a reservoir on the end to hold semen. Always be aware of acts that can result in tears or breaks in the condom. The condom must be used during the entire period of sexual contact. That is, the condom should be worn before any genital contact. The condom should be used only one time and should not be allowed to remain in the sexual partner until erection is lost which then allows the condom to slip off. Protect the condom from heat and abuse such as the heat exposure inside hot cars or the abuse of sitting on them inside back pockets or wallets. Condoms can provide protection against herpes, chlamydia, trichomonas, AIDS, syphilis, gonorrhea, yeast, and possibly other STDs. Of course, the condom will not protect those areas which it does not cover (pubic area and upper legs). Herpes sores can spread the virus from areas the condom does not cover. The condom will not provide protection from lice and scabies. Other diseases such as hepatitis can be transmitted by nonsexual means and therefore the condom does not necessarily guarantee protection from those diseases. The viruses of AIDS and herpes cannot penetrate the condom in most cases. There are few side effects from the condom. Very rarely, there may be an allergy to the latex of which the condom is made or to the spermicide used with the condom.

Thorough washing of the genitals and the pubic area after sexual contact can also provide slight protection from STDs. Urinating after sexual contact may also aid in lessening the chance of acquiring a STD. Reducing the number of sexual contacts will help also, as this reduces the chance of exposure. It is important to be in control and sure of your sexual decisions. Don't be reluctant to look and examine your sexual partner's genitals or to refuse sexual contact if you are unsure (particularly with a new sexual partner).

Any infection of illness may produce a wide range of emotional responses. For example, a person may respond to having the common cold with feelings of being irritable or even with depression. The same is true with a STD. An emotional response is part of the normal process of dealing with the infection. The added burden of the current negative attitudes of the general public concerning STDs plus the frequent inability to confide in friends for emotional support leads to a wide variety of emotional responses. Some of the usual predictable emotional responses are shock, anger, guilt, and fear. Of course, the emotional responses are influenced by the person's basic personality, the type of

STD, and the circumstances surrounding the contraction of the STD.

**SHOCK:** Learning that you have a STD is often accompanied by shock. "How could this happen to me?", "I thought that this only occurred to someone else" are not uncommon responses. Although other factors are involved in STDs, shock is a usual response to any new illness.

**ANGER:** Anger directed at your sexual partner for giving the STD to you or even at yourself if you are the one who contracted the STD is also not unusual. Some people 'vent their emotions'. A person must learn to cope with a STD. This must be done so as not to allow the anger to get out of control.

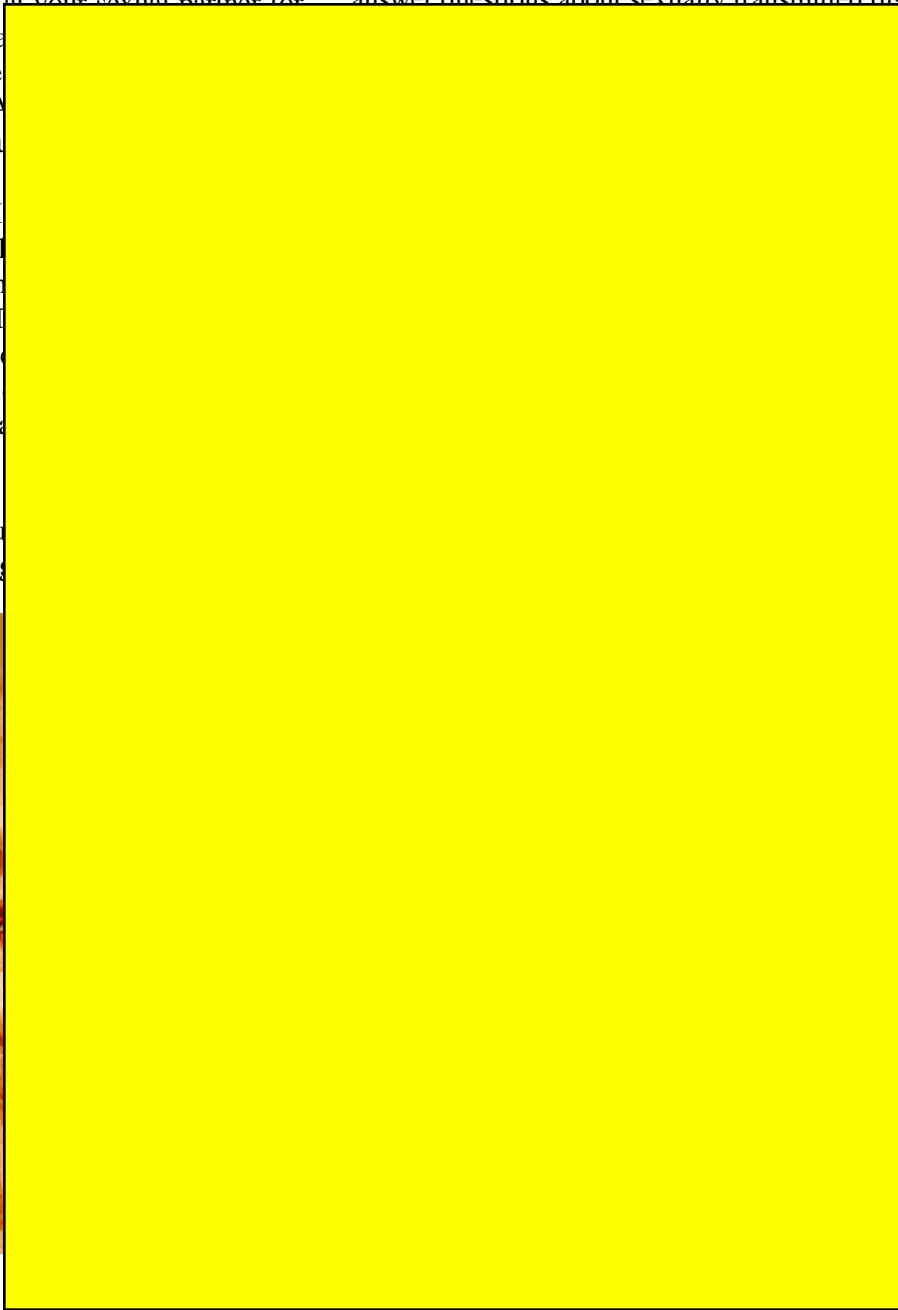
**GUILT and SHAME:** Many people who contract STDs with lower class and the inner city. STDs are still associated with some people who go to prostitutes. Many feel that a STD is a result of their sexual activities. You will be one of the first to learn that STDs have nothing to do with cleanliness. It does not discriminate and does affect all.

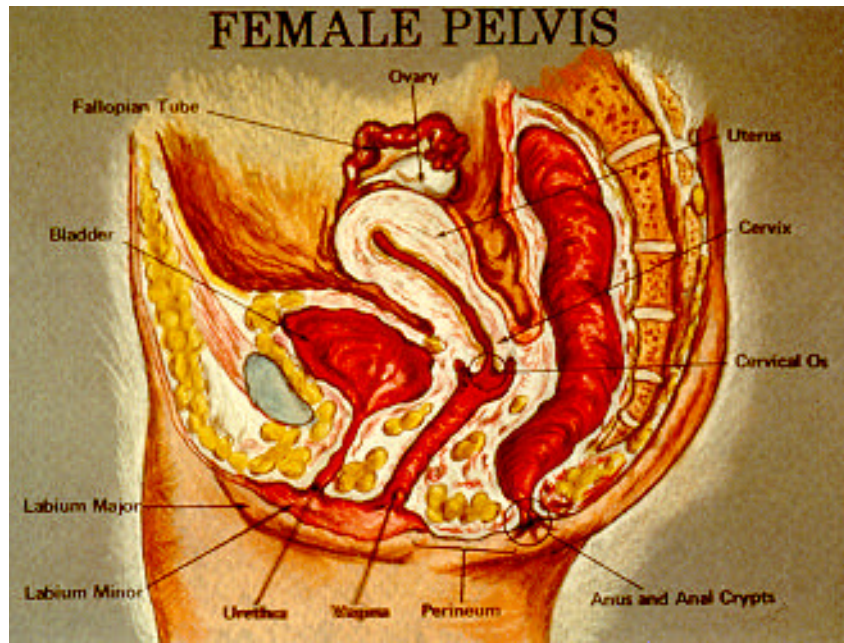
**FEAR:** Fears associated with STDs are those involving concerns about impotence, cancer, or transmitting

else. While all these fears are justifiable, they could be alleviated by gaining an understanding of STDs.

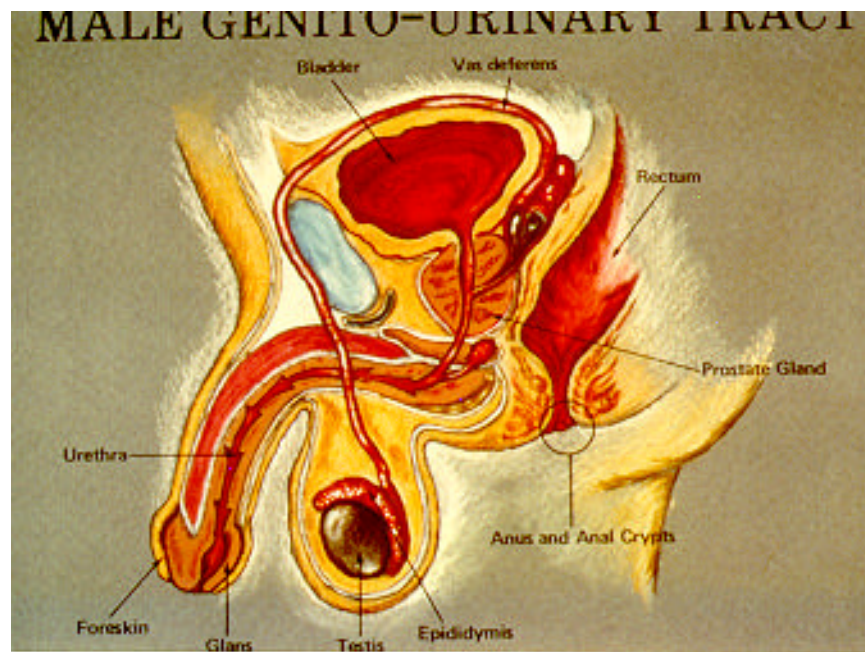
**The National VD Hotline is 1-800-227-8922 (in California 1-800-982-5883).** This toll free number service is sponsored by the American Social Health Association. They have a list of private doctors and health clinics that will accept patients for the treatment of STDs. Also, they answer questions about sexually transmitted diseases.

are felt to be the most important diseases. STDs are a category of these diseases. It is quite common, in a broad sense, with infections. The purpose of this manual is to inform you of the purpose of this manual. It is not intended to be used in this manual. Abbreviations





**Illustration of the female pelvis**



**Illustration of the male genitourinary tract**

# GONORRHEA

Gonorrhea, also referred to as the clap, GC, or strain, is caused by a bacteria known as *Neisseria gonorrhoeae*. It can involve the eyes, mouth, throat, anus, vagina, and the penis. "Gonorrhea" originally meant a flow of seed (semen) and was referring to the discharge from the male penis. In 130 AD, the Greek physician, Galen, thought that this disease was an involuntary flow of semen and therefore used the name gonorrhea. "Neisseria" comes from Albert Neisser who, in 1879, first identified the organism responsible for gonorrhea.

Transmission is by sexual contact with someone that has gonorrhea. Sexual intercourse with someone with gonorrhea does not always result in transmission of the disease. If the male has gonorrhea at the time of sexual intercourse, the female's chance of getting gonorrhea is around 80%. If the female has gonorrhea at the time of sexual intercourse, the male's chance of getting gonorrhea is only about 20-35%. The more numerous the exposures, the higher the chance of getting gonorrhea. The incidence rises to about 80% with repeat exposures to the same infected woman.

Symptoms vary from person to person and also at different sites. Beginning from 2 to 8 days after contact, there will be a thick white or yellow discharge (pus) from the penis or vagina. There may rarely be symptoms as early as 1 day after contact or as late as 1 month after contact. Many persons with gonorrhea will have tender and swollen lymph nodes present with the discharge. There is a moderate burning sensation while urinating. The person may however have only a discharge and no burning or only a burning sensation without a discharge. Rarely, neither a discharge or burning will be noticed. Therefore, if you have only minimum symptoms, you should see a physician.

The cervix is the usual site of infection in the female, resulting in a discharge of pus. The cervix is deep inside the vagina and therefore this discharge may or may not be noticed. Consequently, in the female, the symptoms are usually less noticeable than in the male. The infected person without symptoms is still capable of transmitting gonorrhea. Seventy-five to eighty percent of females with gonorrhea may not recognize symptoms. Asymptomatic gonorrhea is felt to represent only about 20% of the males with gonorrhea. Most infections are transmitted by individuals that do not have symptoms or do not recognize the symptoms of gonorrhea.

Gonorrhea of the throat (gonococcal pharyngitis or pharyngeal gonorrhea) may also go unnoticed. This type of gonorrhea is contracted by orogenital sex. Symptoms, if

noticed, consists of fever, chills, and a sore throat. It should be pointed out that not all of the different types of treatments for gonorrhea will eliminate or cure pharyngeal gonorrhea. Again, some of the treatments given for gonorrhea involving the urethra or cervix will not cure pharyngeal gonorrhea and it is therefore important to tell your doctor that you may have gonorrhea involving the throat.

Because there may be no symptoms, gonorrhea of the anus can also go unnoticed in more than 50% of infected persons. Anal gonorrhea is contracted either by anal sex or by autoinoculation. If the vaginal or penile discharge contaminates the anal area, it is possible for this to result in anal gonorrhea (autoinoculation). A person with anal gonorrhea may have a discharge from the anus, an anal burning sensation which is more intense during bowel movements or intercourse, blood or pus in the stool, and a sensation of incomplete bowel movements. As is the case in pharyngeal gonorrhea, some of the treatments used for gonorrhea involving the urethra or cervix will not cure anal (anorectal) gonorrhea.

Gonorrhea may involve the eyes producing a condition known as gonococcal conjunctivitis (ophthalmia). One of both eyes will become red and swollen. There will also be a drainage or pus from the infected eye(s). This infection can be very serious. Blindness can result from an infection that is not treated or that is treated too late. Gonococcal conjunctivitis usually results from transferring the infection by hand. This occurs when infected sites are touched and subsequently the eyes are touched. In the infant, the eye infection can result at birth during passage through the birth canal. Cultures are done to detect this type of infection. Treatment consists of antibiotic injections AND eye drops. Persons with gonococcal conjunctivitis should be hospitalized.

Almost half of those with gonorrhea have been found to also have a chlamydia infection (see sections on CHLAMYDIA, NONSPECIFIC URETHRITIS, and LYMPHOGRANULOMA VENEREUM).

## COMPLICATIONS

**GONOCOCCEMIA:** Gonococcemia is an infection of the blood by the gonorrhea bacteria. It usually develops within two months of untreated gonorrhea. It is more common in females and frequently begins around the premenstrual period. There is a gonococcal arthritis-dermatitis syndrome which can result as a result of gonococcemia which causes fever, chills, joint inflammation, joint pain, conjunctivitis, pharyngitis, and skin involvement. The skin lesions are small red nodules and pustules that may or may not be tender and usually do

not itch. The joint involvement may consist of pain in several joints or it may be a single joint that is swollen and painful.

**ARTHRITIS:** Arthritis can develop as a result of gonorrhea. This arthritis is more common in females than in males and frequently begins around the menstrual period. Gonorrhea is the most common infectious arthritis in young people. The arthritis consists of pain in various joints. The joints may be hot, red and swollen with fluid or they may only be painful. Tendinitis (inflammation of the tendons) is commonly present and this may or may not be mentioned gonococcal

**PELVIC INFLAMMATORY DISEASE (PID)** known as PID and is a common condition in women with gonorrhea. PID, a painful inflammation of the pelvic organs, is the infection. This usually occurs following exposure to gonorrhea or other infections with numerous bacteria normally found in the vagina. Therefore, PID does not always result from gonorrhea. There may be one episode of gonorrhea PID each year or several. A number of women each year have PID. Some other causes of PID include Bacteroides, Hemophilus, and Chlamydia in the uterus, and fallopian tube infection. PID. The inflammation can cause tubal blockage, pelvic adhesions, and tubal pregnancies, ovarian cysts, and is the major cause of infertility. Each subsequent episode of PID increases the development of sterility. After one episode of PID, 10-20% of women may subsequently develop PID. 30-50% after two episodes and 80% after three episodes. Even a single episode of PID for gonorrhea can develop into a chronic area. It is not uncommon for PID to recur during the menstrual period. Symptoms of PID consist of nausea, vomiting, and cramping in the lower abdomen. These symptoms can be mistaken for appendicitis. It is possible to have PID (such as irregular menstrual cycles or mild to moderate crampy pains around the menstrual period) for several months prior to developing more severe symptoms of PID. Many women with PID will require hospitalization for treatment. Hospitalization may be necessary to evaluate for

possible causes, other than PID, of the symptoms. Conditions such as ectopic pregnancy, appendicitis, ovulation pain (mittelschmerz), urinary tract infection, ovarian cysts, ovarian tumors, kidney stones, inflamed lymph nodes, gallbladder inflammation, endometriosis, adhesions and diseases of the intestine can all be mistaken for PID. If the diagnosis of PID is not certain, a laparoscopy may be done to prevent the deadly consequence of missing an ectopic pregnancy or appendicitis. Culdocentesis is another procedure that may be needed for

one with a history of PID. Physicians should be consulted to decide if hospitalization is required, and if so, the person should be hospitalized for the tests. If the tests are positive for the PID rest assured that the partners of the person should be treated for STD. Gonorrhea and PID is very common. After treatment, confirm the diagnosis. Women with PID are at a high risk of developing PID 7 times more often than in a woman with a normal infection or use it. There have been reports of PID by fifty percent. SPECIFIC symptoms of PID, such as arthritis, PID, gonococcal infection (gonorrhea) can be treated. The person should be treated. This is a common condition. Adhesions can also develop. Hydria. PID is a common disease. As in the female, gonorrhea can result in sterility of the male. A possibility exists for other complications such as scrotal swelling and pain (epididymitis), and difficulty in urinating due to scarring inside the penis. Most of these



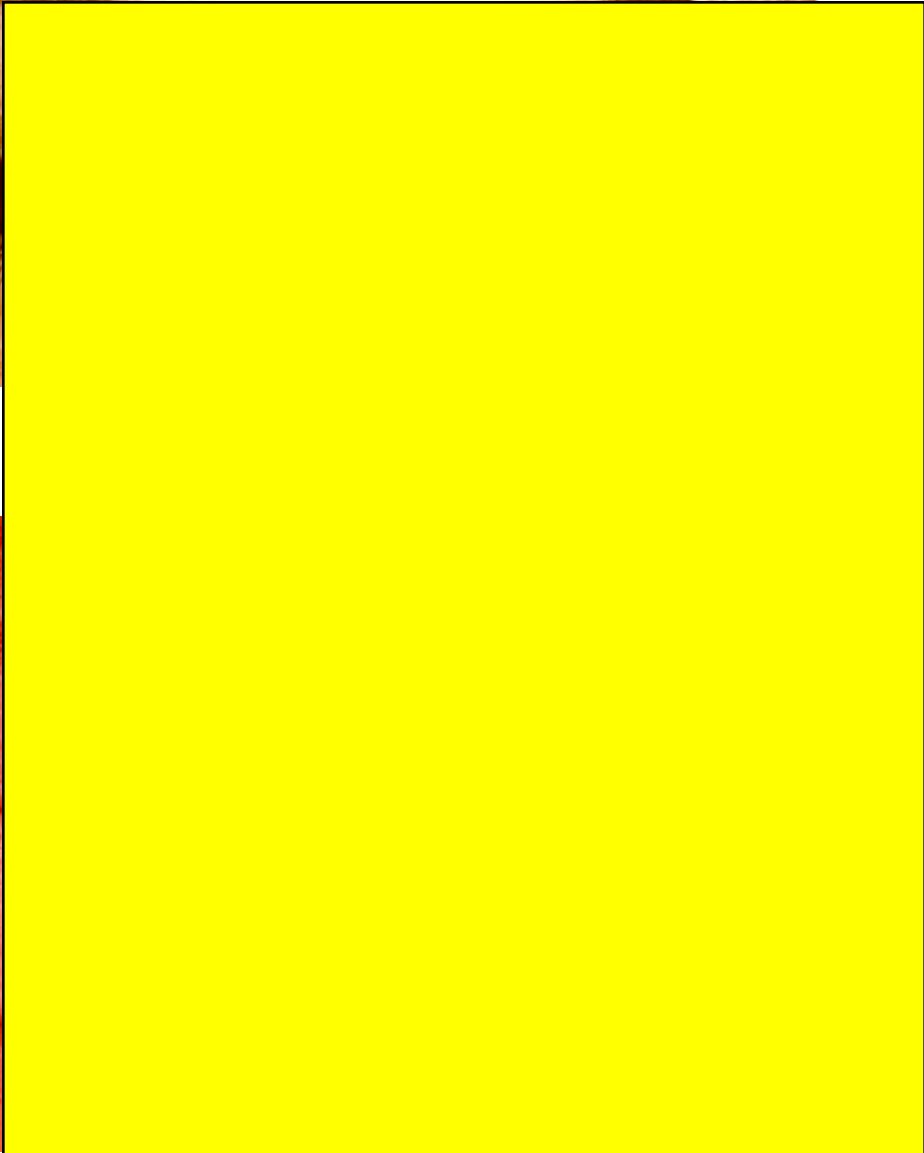
reduced. A vaccine against gonorrhea is currently being evaluated.

Beta gonorrhea is a gonorrhea bacterium that has the ability to produce an enzyme called beta lactamase (penicillinase). This enzyme breaks up the penicillin and thereby renders the penicillin ineffective against gonorrhea. Of course this means that the standard treatment of gonorrhea with penicillin will not cure the disease and other antibiotics must be used. Everyone should have a culture four to seven days after treatment of gonorrhea to make sure that the treatment has cured the disease. Other cultures should be done one month and three months after the initial negative culture. All treated individuals that are found to have a repeat positive culture should have their culture

tested for the possibility of beta gonorrhea. Anyone with a high possibility of having beta gonorrhea should be checked for this possibility initially. Such persons are those that have a history of sexual activity in Southeast Asia or sexual activity with possible beta gonorrhea. Although the prevalence of beta gonorrhea in the United States is low, the prevalence of beta gonorrhea have been reported in the United States in servicemen in San Diego (after exposure in Southeast Asia). Beta gonorrhea is also referred to as Penicillinase-Producing Gonorrhea (PPNG). The symptoms and signs of beta gonorrhea are the same as non-beta



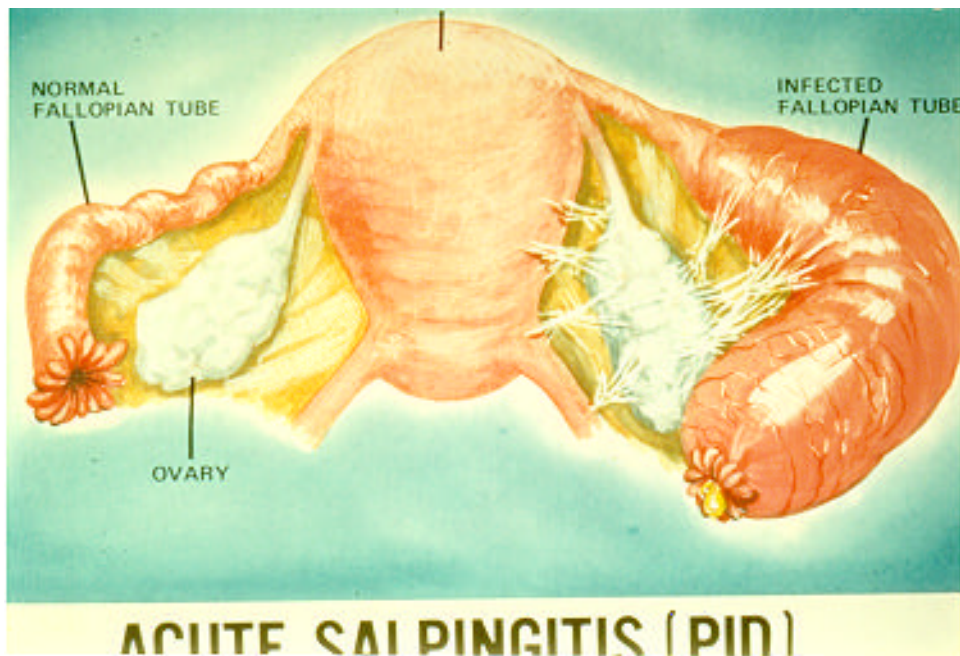
**The discharge of gonorrhea from the penis**



**Gonorrhea involving the eyes.**



**Skin lesion of the foot due to gonorrhea which has spread through the blood to this site.**



**Illustration of Pelvic Inflammatory Disease (PID) with a swollen and infected fallopian tube plus surrounding inflammation.**

# SYPHILIS

The name of this disease comes from the name of a mythical shepherd. Syphilis was the name of a shepherd in a poem written in 1530 by Hieronymus Fracastorius. In the poem, Syphilis blasphemed the sun god. As punishment, the sun god gave a disease to the shepherd. The poem describes the effects of this disease. At the time the poem was written, there was awareness of a disease (syphilis) which was known as the great pox due to the severe outbreaks of the

disease. The current name for the great pox in the contrast to the great name---small pox.

During the 15th century, gonorrhea and syphilis were often confused while studying the disease. In 1494, a patient who died from syphilis was found to have the patient had both. In other words, say, this helped to distinguish that gonorrhea and syphilis are not until 1838 that they were found to be separate diseases. This is to remind you that syphilis and gonorrhea are not the same time.

In 1905, it was determined that syphilis was responsible for causing syphilis in humans. It can survive long off the body through the blood and vagina). These are the only ways of contact with the syphilis of someone else or from a syphilis carrier to syphilis. Contact with the mucous membranes can transmit the disease. Syphilis can enter the body through the mouth only a few hours after contact with the body. Except for congenital syphilis, passed to their babies, people with syphilis are generally

Syphilis can cause blindness, heart disease, blood vessel disease, brain disease, and many other major illnesses. Syphilis can be thought of as producing diseases and abnormalities in the entire body! Sir William Osler indicated that if a doctor knows syphilis then that doctor knows medicine. This is because of the widespread

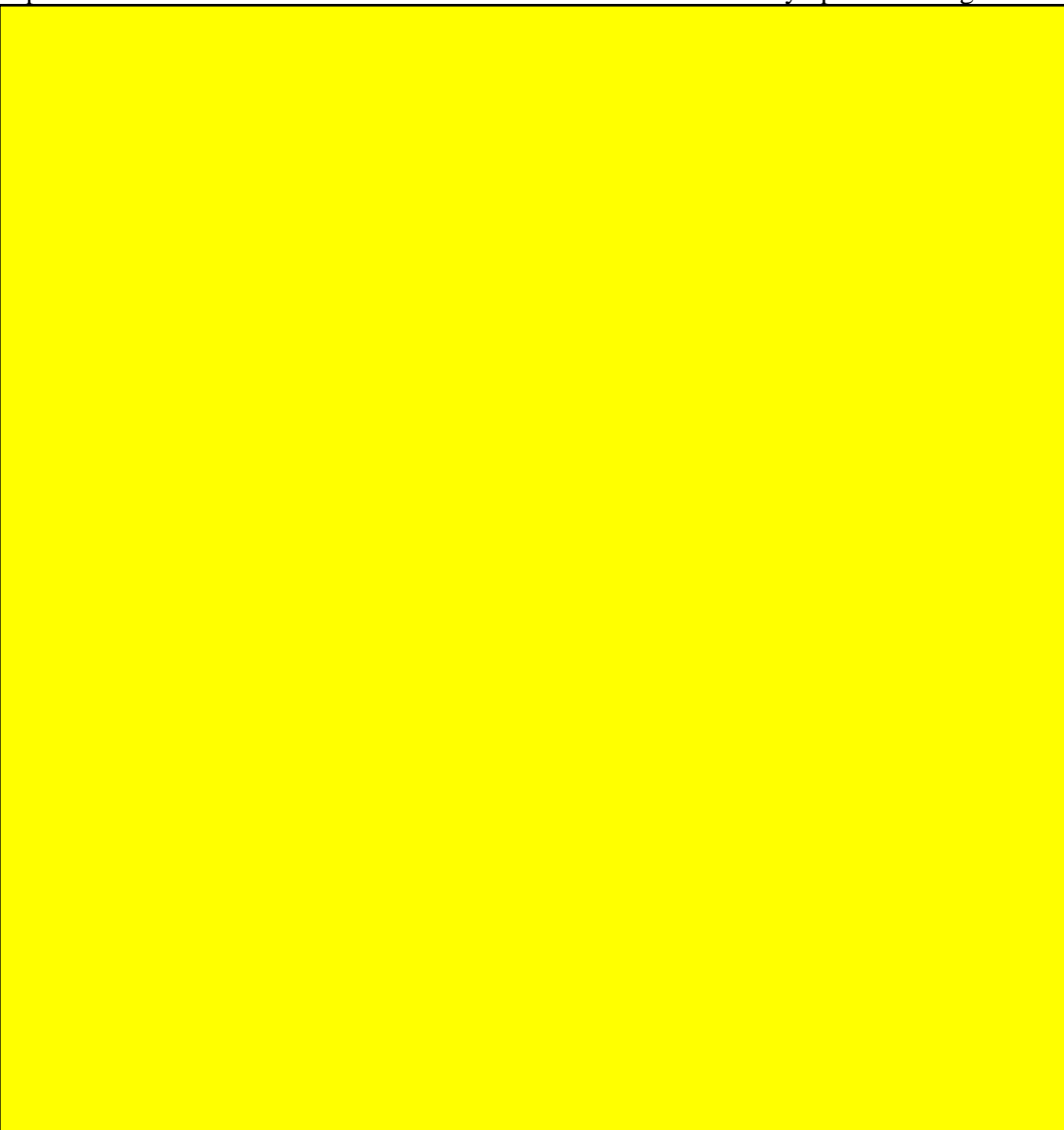
abnormalities, signs, and symptoms that are a result of the disease.

Syphilis has several stages:

- 1- Incubation stage.
- 2- Primary stage.
- 3- Secondary stage.
- 4- Latent stage.
- 5- Late or tertiary stage.

## Incubation Stage:

There are no symptoms during this stage. This is



person and symptoms. The incubation period after sexual contact with a person having this time problem this is negative contact with a person infected by a syphilis carrier. They not only are still at risk for syphilis. If you have a chancre, you should get tested. Again, a chancre is caused by a syphilis carrier in this stage of

(a chancre) entered the body through the mouth, anus, lips, or vagina. A chancre first appears (blood tests) the next 1 to 3 weeks as a red sore or lesion about the size of a pencil eraser. It is usually painless and lasts more than 3 weeks. It is usually a chancre is a chancre. The area of the chancre may go away but the painless

chancre on the throat may not be recognized. On the lips or in the mouth it may be mistaken for a cold sore. A rectal chancre may not produce any symptoms unless it becomes infected with other bacteria. The chancre inside the vagina may not be noticed. Adding to the problems of the chancre being unnoticed, mistaken for another minor ailment, and causing little to no pain is the fact that the chancre will heal

and disappear in a few days or weeks without any treatment. Be sure to understand that the chancre heals but the infection and the effects of syphilis continues.

**Secondary Stage:**

If there has been no treatment of the syphilis during the primary stage, it will progress to this stage. The symptoms of this stage begin from 2 to 6 months after the initial infection. It is not uncommon for someone to discover they have syphilis only after the secondary stage appears. There may be several months between the disappearance of the chancre and the appearance of the secondary stage. During these months the person has no idea of having syphilis. A rash is the most common symptom of secondary syphilis. It may resemble measles, chicken pox, or a drug reaction. It may range in appearance from small red bumps on the skin. These rashes may be on the trunk, mouth. Although there are severe cases that affect the palms of the hands and the soles of the feet. The development of a rash on the palms and soles should be evaluated with a blood test for syphilis. The test (STS) is always positive in the secondary stage.

Wart-like lesions are a common symptom of secondary syphilis. These lesions are actually the papules that appear in the inguinal and genital regions the most common due to the moisture in these areas. They are referred to as condylomata lata and are highly contagious.

Other signs and symptoms that may occur are enlargement of the lymph nodes, joint aches, hair loss, headaches, and a decreased appetite. As in the primary stage, the signs and symptoms of the secondary stage will resolve without treatment but may intermittently reappear. Once again, the absence of symptoms does not mean that syphilis is still present in the body. It should be mentioned again that syphilis can be transmitted through membranes or open cuts.

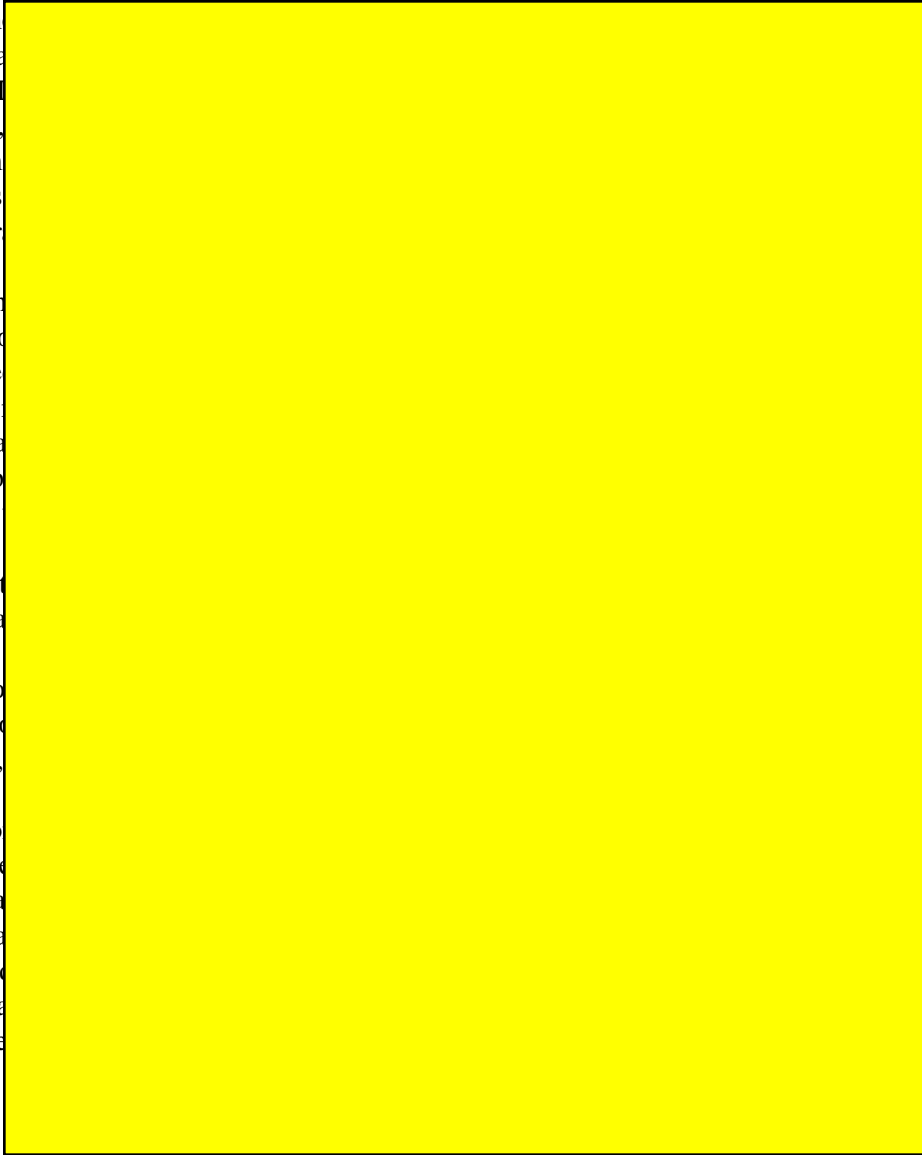
**Latent Stage:**

This is the stage in which there are no symptoms. The latent stage can be considered as the period between the disappearance of the chancre and the appearance of secondary syphilis, as the period between recurrences of the signs and symptoms of secondary syphilis, or (the usual definition) the period after the secondary symptoms disappear and before damage occurs to body organs. Since

there are no symptoms, this stage is diagnosed by lab studies only. Except for women who can occasionally transmit the disease to their babies during pregnancy, persons with latent syphilis usually are not infectious to others. Persons may remain in this stage for the rest of their lives without progression or they may progress to the late stage. Treatment of syphilis up to and including this latent stage is simple and offers a complete cure. This is not true once a person enters the late stage.

**Late (Tertiary) Stage:**

This stage follows the latent stage, although



necessarily of untreated damage. Of This stage latent stage. e or it may late stage years. This tems. Such blood vessel n develop. vessels, and ly result in (tertiary syphilis) el control, blindness, decrease in ment of the ve damage myocardial of syphilis. known and

ease of the gnancy, an tus (baby). weeks) of of syphilis congenital pregnancy . The baby mptoms at by may be

severely damaged with such abnormalities as blindness, deafness, paralysis, brain damage, and facial abnormalities. From birth to two years of age the infant can have a variety of skin lesions from those resembling diaper rash to vesicular lesions that may also involve the palms and soles. there may be a nasal discharge which is very contagious.

Other later abnormalities are deafness, nasal septal perforation, a saddle shaped nose, teeth abnormalities, joint abnormalities, and other bone problems. Treatment of the mother prior to the 18th week of pregnancy will prevent the baby from having the disease. Treatment of the mother after the 18th week of pregnancy will also cure the baby, however the later in pregnancy that treatment is given the greater the chance that the infant will have some of the effects of congenital syphilis.

#### **Serologic Tests For Syphilis (STS):**

Serologic tests for syphilis are blood tests. There are many STS that can be performed. It should be remembered that a person may have syphilis and, during the first 10 days to 3 months after infection, have a blood test that will not indicate the disease. The chancre may be present for up to 2 weeks before the blood test for syphilis is positive. It is important therefore that a repeat blood test is obtained if the test is negative and symptoms of syphilis are present. The tests are also necessary on spinal fluid if there is a possibility of syphilis being at the late stage. The spinal fluid should also be examined if there are signs and symptoms of syphilis involving the nervous system or if the syphilis infection has been present for more than one year. If you are sexually active, it is a good idea to have a blood test for syphilis every 3 months. If you and your sexual partner only have sexual contact with each other, then the chance of a STD is almost zero.

**REAGIN TESTS:** These blood tests (also referred to as nontreponemal tests) may be positive in some that do not have syphilis (a false positive result). The reason for this may be unknown or it may be due to other illnesses such as hepatitis, mononucleosis, measles, chickenpox, rheumatoid arthritis, immunizations, leprosy, heroin use, and malaria. There are other reported conditions that can cause false positive results. These tests generally decrease in their degree of reactivity as the person recovers from syphilis and are therefore useful in following the response to treatment.

Wassermann ---- This test is no longer used. It is one of the earliest reagin test, coming into use in 1906. The VDRL and RPR are the most common tests that are now used instead.

VDRL ---- The Venereal Disease Research Laboratory. This blood test is commonly used in screening for syphilis.

RPR ---- Rapid Plasma Reagin. This is similar to the VDRL but the method of the test allows immediate testing. The RPR is a more sensitive test than then VDRL.

General Characteristics Of Reagin Tests (VDRL and

RPR):

A- The reagin test will usually remain negative with treatment during the incubation period.

B- The reagin test will usually remain negative with treatment during the early primary stage. Occasionally it will become positive for several weeks and the revert to negative.

C- The reagin test, if positive, will usually become negative within 12 months if treatment is administered during the primary stage.

D- The reagin test, if positive, will usually become negative within 18 months if treatment is administered during the secondary stage.

E- The reagin test, if positive, may or may not become negative with treatment in those having syphilis for 2 or more years.

**TREPONEMAL TESTS:** These blood tests use the antigen material of the organism that causes syphilis in the testing of a person's blood for possible evidence of syphilis. These tests, if positive, indicate the presence of syphilis at some point in the past. Regardless of treatment, these tests will be positive if a person currently has syphilis or if a person had syphilis in the past

TPI ---- Treponema Pallidum Immobilization test. This is not an easy test to perform and is expensive. It can be used in especially difficult diagnostic cases to determine the presence of syphilis. The TPI is not as sensitive as the FTA-ABS. Currently the TPI is used only in research.

RPCF ---- Reiter Complement-Fixation test. The RPCF is easy to perform and is not expensive. It is not as sensitive as the other tests and therefore rarely used. Since it is not very sensitive, a positive test is usually indicative of infection.

MHA-TP ---- Microhemagglutination Assay for Treponema Pallidum. This test is less sensitive than the FTA-ABS in primary syphilis.

FTA-ABS ---- Fluorescent Treponemal Antibody Absorption. This is the most commonly used treponemal test.

Here are examples to demonstrate the use of the VDRL and the FTA-ABS blood tests. These are not absolute as other factors may be involved. If the need arises, the physician will consider other possible alternatives.

1- Positive VDRL/Negative FTA-ABS: The person has a false positive test for syphilis.

2- Positive VDRL/Positive FTA-ABS: The person has untreated syphilis.

3- Negative VDRL/Positive FTA-ABS: The person has been treated for syphilis in the past.

All blood tests which are positive for syphilis (including any positive tests done by or in your physician's office) are reported to the public health office. Many types of infections, including several of the STDs, are required by law to be reported to the public health office. These reports are very confidential. Public health offices will also perform tests for syphilis.

The darkfield microscopic exam is another method used to diagnose syphilis. The lesion is scraped and material is specially prepared for viewing under darkfield microscope. The examiner then searches with microscope to identify the organism of syphilis.

#### TREATMENT

The treatment of syphilis is an injection of a long acting type of penicillin (Benzathine Penicillin). As treatment for recently acquired syphilis, a person is no longer infectious after approximately 2 days. However,

would be safer to wait for about 1 week or until released by your physician before resuming sexual activity. Persons exposed to syphilis within the past three months and/or felt to be in the incubation stage should be treated regardless of the result of blood tests.

There is a well known reaction which usually occurs shortly (usually within the first 12 hours) after treatment of syphilis. This is called the Jarisch-Herxheimer reaction. This is not an allergic reaction to the medication. It is only an indication that the medication is killing the syphilis organism, *Treponema pallidum*. Lasting 12 to 24 hours, the reaction consists of an elevated temperature (101

the lesions or the rash. It is painful. The use of aspirin. The use of it for a

syphilis are the interval ends on the need to have the first year those with the of initial up schedule



**The chancre (primary sore of syphilis) on the vaginal labium**



The chan



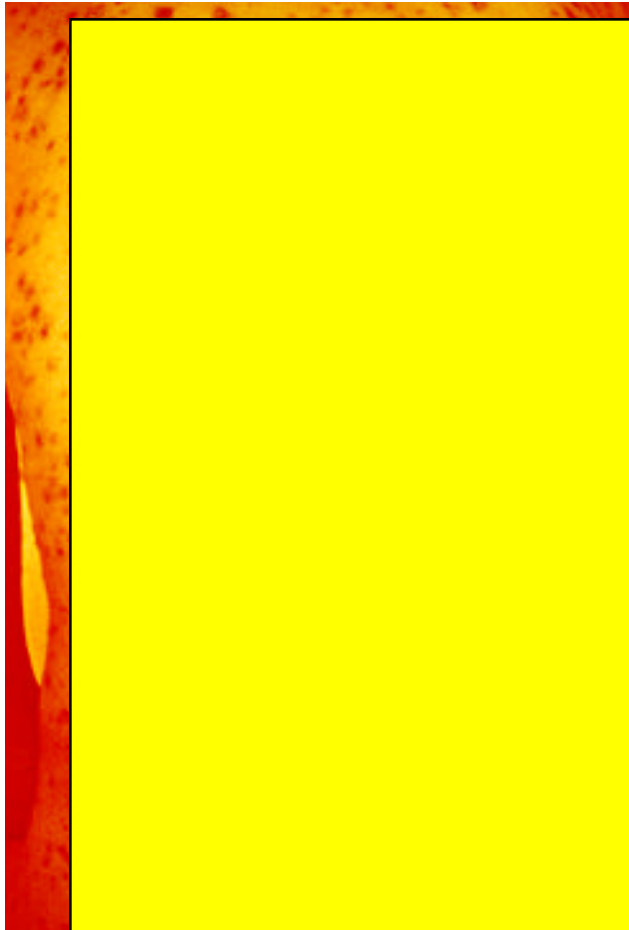
The chancre of syphilis on the upper lip.



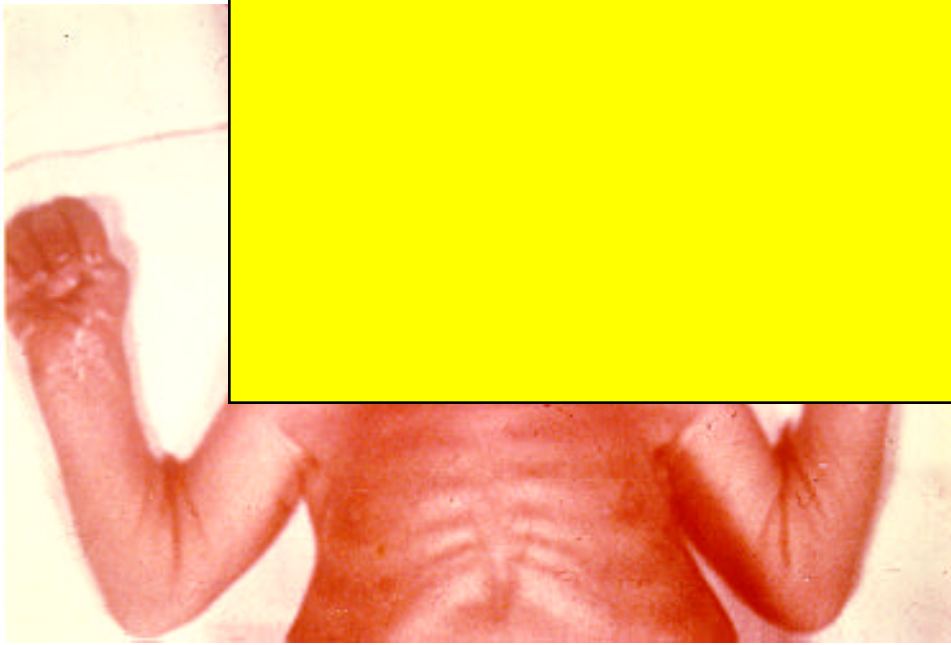
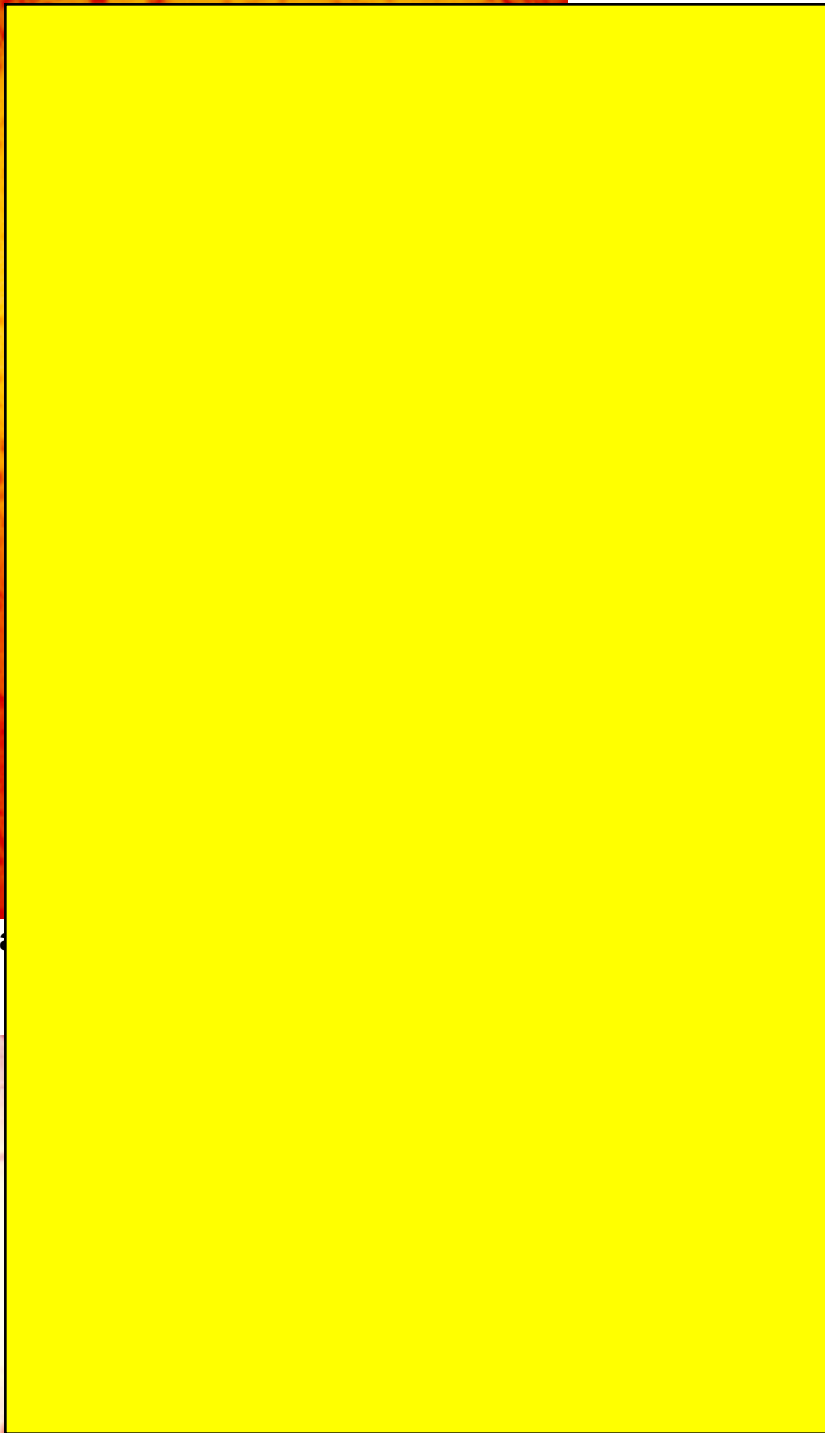
**The rash of secondary syphilis on the palms of the hands.  
This rash is contagious.**



**The rash of secondary syphilis on the back.  
This rash is contagious.**



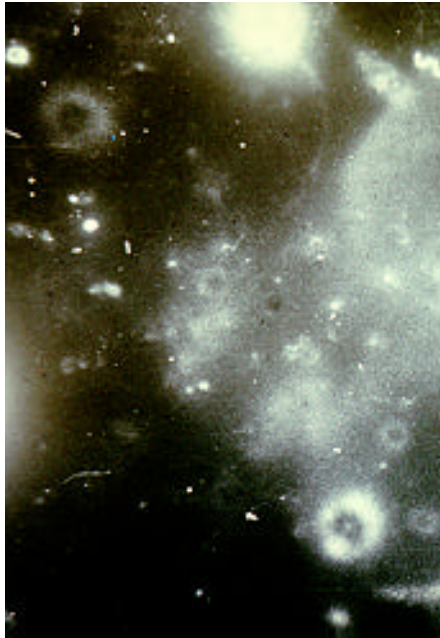
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**An infant with congenital syphilis.**



**An infant with the chancre of s**



**Microscopic darkfield a  
Treponema pallidum**

**The spiral-like objects are the syphilis organisms.**

# HERPES PROGENITALIS

Genital herpes was first described in 1736 by the French physician John Astruc. Genital herpes (Herpes Progenitalis) is considered to be the major STD of the 1980's due to the absence of an effective treatment and because of the large number of people contracting the disease. It is estimated that 20 million Americans have the disease and

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HERPESV He He Va

Epstein-Barr Virus (Infectious Mononucleosis).  
Cytomegaloviruses (Cytomegalovirus infections;CMV).

The symptoms and lesions are the same for herpes

type I and herpes type II. The first symptoms of genital herpes are pain and itching. There may also be a numbness, tingling or burning sensation. Fever may be present. A few days later blisters will appear. These blisters will appear from 2 to 20 days after contracting the virus. When the blisters appear, they may be accompanied by muscle aches, malaise, low-grade fever, chills and swollen glands. The blisters break open and are very painful. The broken blisters become small shallow ulcers which tend to progress to crust-covered sores. A few weeks later (usually 4 to 6

although the l painful, it f the initial the vagina, so seem to had lesions ve herpes toms while lifetime is herpes can

virus does g nerves to n) where it p reappear. ces are due light, poor k of sleep, rsons with es, some up with genital will have

ss, tingling, esions will to occur months or t a general st infection rrences are d are less aise, fever, one should develops in

Rectal herpes is more frequently seen in the homosexual population although it is not limited to this group. Pain and blisters are still the major symptoms. The person may also have swollen glands, constipation, and abdominal pains.

Herpes involving the eyes is serious and can cause



transmission of herpes. They should be used because in those without symptoms there isn't any way to tell by looking if they are shedding the virus. The use of condoms, foam, diaphragm, etc. is not appropriate when active lesions are present. Remember, there should be no sexual contact while symptoms and/or lesions are present. One also must be careful not to spread the virus to other areas of the body, particularly the eyes. This could result in a very

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usually the only place to obtain type identification because special equipment and chemicals are needed.

There is no cure for herpes but treatment is available. The absence of a cure does not mean that the infection is fatal or will result in serious consequences. Most of the feared complications of genital herpes can be prevented. Remember, there is also no cure for the common

cold. Acyclovir ointment (Zovirax 5%), approved by the Food and Drug Administration (FDA) in 1982, may help but it is not a cure. It is more effective in initial lesions than in recurrent lesions. Acyclovir is applied to the lesions every three hours, six times per day, for seven days. Treatment with acyclovir within six days of the initial lesions will reduce both the shedding of the virus and the healing time of the lesions. It may also reduce pain.

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such as creams, petroleum jelly, lysine, and aloe vera. Many of these are of no benefit and can even prolong the lesions by retaining moisture.

For those with significant pain, the disease can be debilitating. They may not be able to do anything but stay in bed. Some may need pain medication for extreme pain.

Lidocaine (Xylocaine) ointment may be needed in some cases. If there is pain when urinating, sitting in a bathtub of warm water while urinating can often provide some relief. Caution is advised, as heat may increase the inflammation of the lesions. Cold compresses should be applied to painful lesions for relief.

The lesions can become much worse if they are infected with bacteria. Medication prescribed by the physician will be required for the treatment of infected lesions.

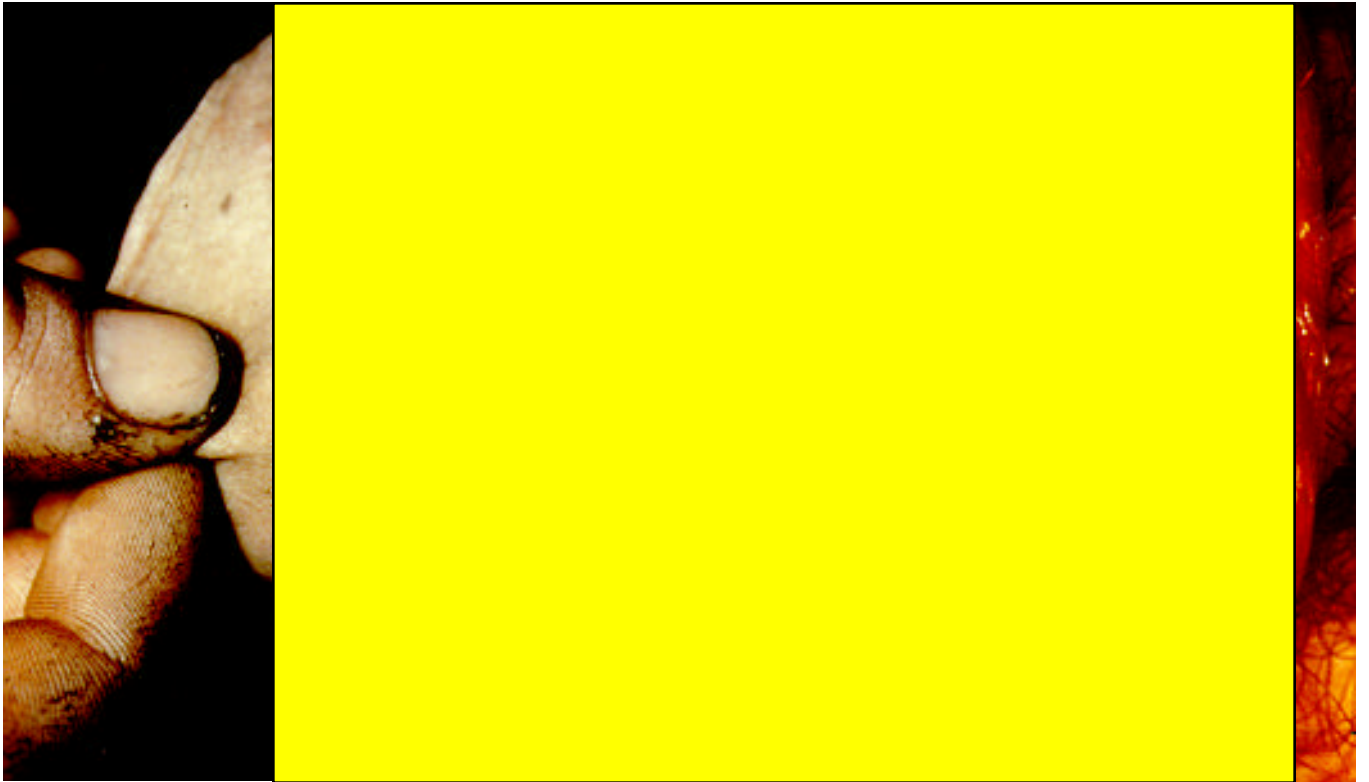
If a person thinks that he or she may have herpes, then that person should see a doctor. There are several reasons for this recommendation. Self-diagnosing can be dangerous. There are other diseases such as candidiasis, molluscum contagiosum, and dermatitis which can cause genital ulceration or blisters similar to those caused by herpes. The treatment of the other diseases would be different and may even be simple. It is not uncommon for someone to wait many months, believing they have herpes, before they finally consult a doctor. It is also not uncommon for that someone to be informed by the doctor that they do not have herpes but instead only a simple dermatitis (skin rash). It is easy to understand that this is a great mental relief to that person because psychological effects and problems such as impotence, guilt, divorce, depression, and suicide are known to be associated with some cases of herpes infections. If that person actually does have herpes, the doctor can not only confirm the infection but the doctor can also give specific information on the care

of the lesions.

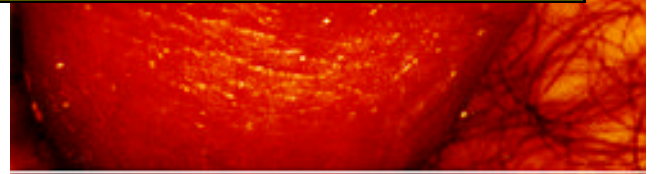
The Herpes Resource Center in Palo Alto, California sponsors over 50 HELP groups (Herpetics Engaged in Living Productively). These groups assist those that request assistance with herpes. They provide information about research, prevention, and treatment of herpes. Send a stamped, self-addressed envelope to: Herpes Resource Center, Box 100, Palo Alto, Ca. 94302. A newsletter about herpes is also available. Named "The Helper", it can be ordered for a small fee at the same address.

Relief from herpes is on the horizon. Advances are continually being made. Stay away from those so-called "herpes cures". Discuss with the doctor your concerns about herpes. You will find that such discussions will greatly aid not only in your understanding of herpes but also in coping with the disease. Remember, herpes is NOT the plague that the media has declared it to be. The problems of herpes are infrequent, can be controlled, and are unlikely to be a threat to your life.

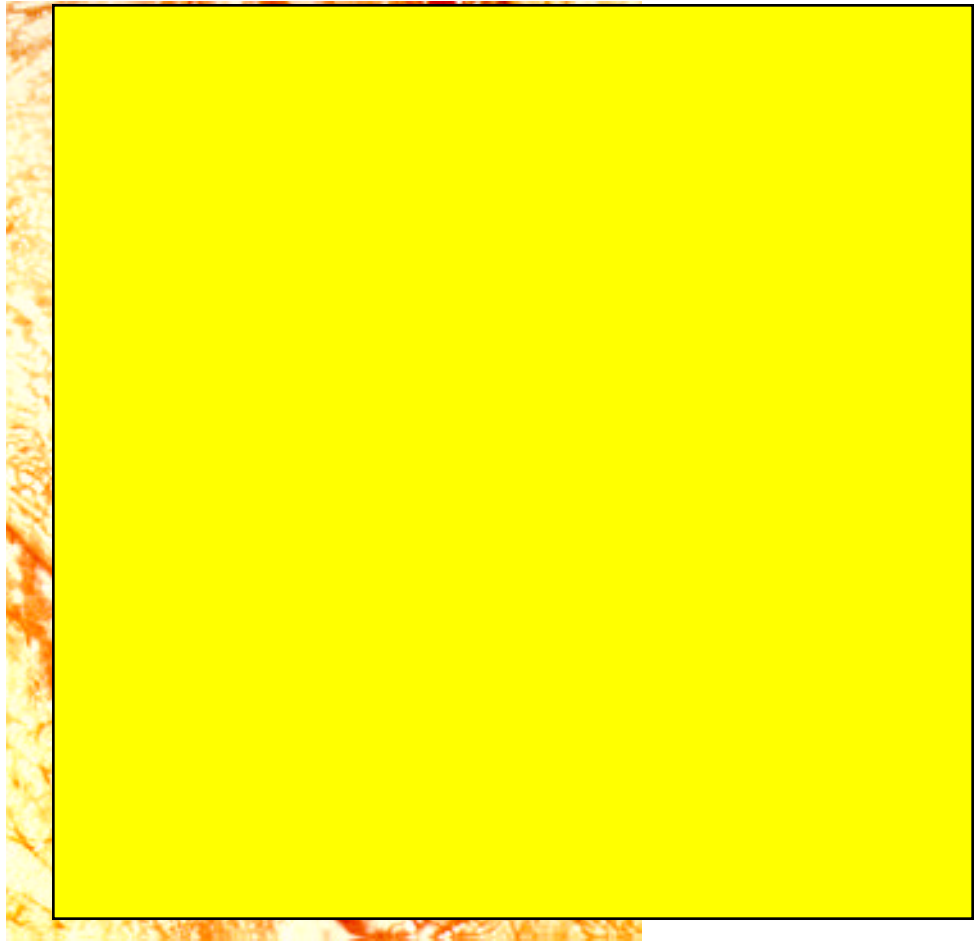
There are promising attempts to produce a vaccine against herpes. Successful immunization with a herpes vaccine would provide protection against herpes just as polio vaccine provides protection against polio. There are reports that a herpes vaccine is also effective in those who currently have herpes infections. If the early reports of success are confirmed, a herpes vaccine will be available within 2 to 5 years.



**The lesions of genital herpes on the penis.**



**The lesions of genital herpes on the penis.**



**The lesions of genital herpes on the vagina.**



**The lesions of genital herpes on the vagina.**



**The lesions of genital herpes around the vagina.**



**The lesions of herpes simplex on the lower lip.**



**Skin lesions in an infant due to herpes.**

# **NONSPECIFIC URETHRITIS (NSU)**

This sexually transmitted disease is also referred to as nongonococcal urethritis (NGU) and postgonococcal urethritis (PGU). Often in the medical profession, if there is uncertainty as to what something is, it names the disease for what it is not. So it is with the case of NSU. This is a urethritis with many of the symptoms of gonorrhea in which a gonococcal infection cannot be found. Postgonococcal urethritis (PGU), and nongonococcal urethritis (NGU) are probably the same disease. PGU occurs in about 40% of patients 14-21 days after penicillin treatment for gonorrhea. It is felt that both gonorrhea and PGU are acquired simultaneously in patients who later develop PGU. Because penicillin is ineffective in PGU, the symptoms of PGU are seen after treatment and resolution of gonorrhea. NSU (NGU, PGU) is two to three times more common than the estimated two million cases of gonorrhea reported each year.

Many infectious agents have been proposed as the cause of NSU. It appears that only two agents are usually responsible. They are *Chlamydia trachomatis* and *Ureaplasma urealyticum* (also known as T-strain *Mycoplasma*). *Chlamydia trachomatis* is also the organism involved in Lymphogranuloma Venereum and has been implicated in Reiter's syndrome (both are discussed elsewhere in this manual). The evidence supporting these two agents as causing NSU is not as strong for *Ureaplasma urealyticum* as it is for *Chlamydia trachomatis*. In 15% of NSU cases, neither agent can be isolated. *Ureaplasma urealyticum* has been found in some men without evidence of urethritis.

The incubation period of NSU is 2-3 weeks. The symptoms are the same as gonorrhea. It is difficult, if not impossible, to separate NSU and gonorrhea on the basis of symptoms alone, but a general pattern is:

## **GONORRHEA**

Incubation:	2 to 7 days.
Dysuria:	Moderate to severe.
Discharge:	A profuse yellowish to greenish discharge.

## **NONSPECIFIC URETHRITIS**

Incubation:	2 to 3 weeks.
Dysuria:	Mild
Discharge:	A white watery discharge mostly present in the morning on arising.

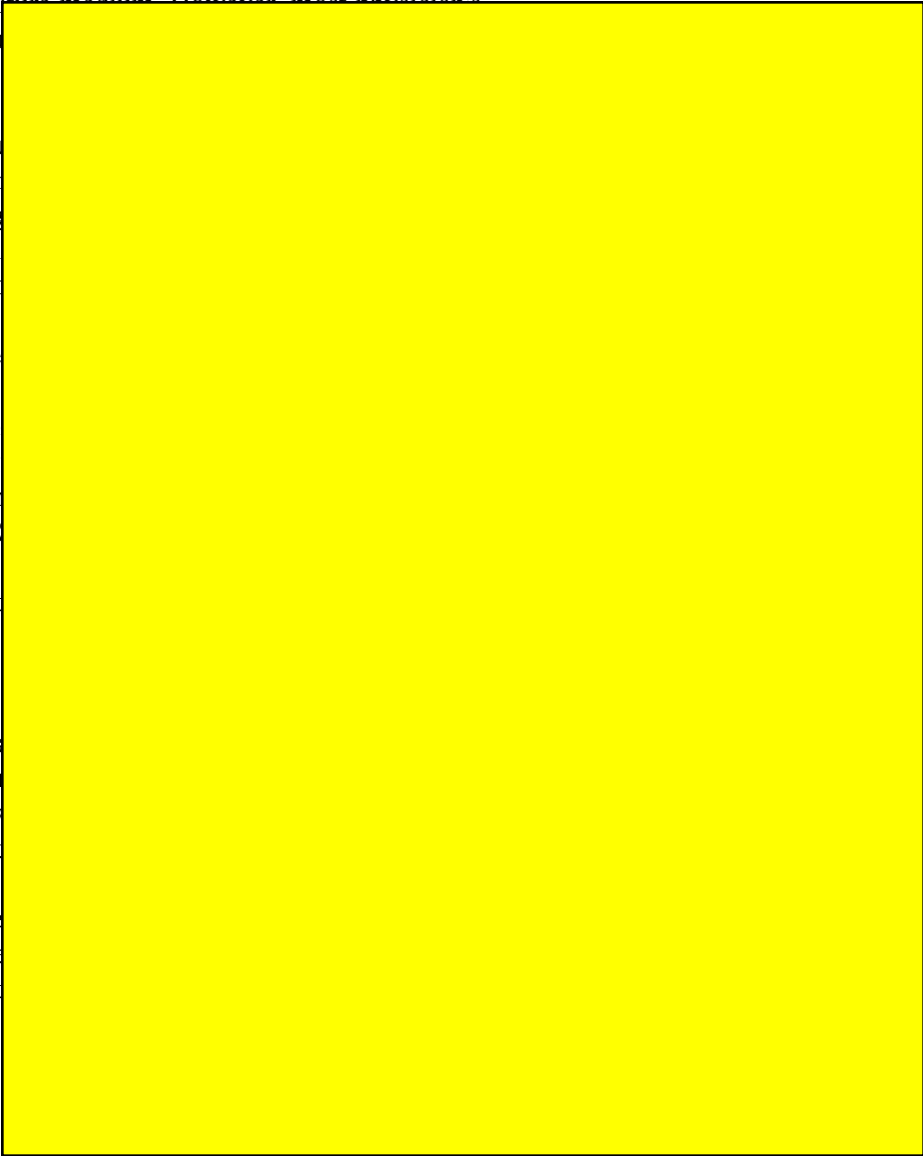
The symptoms of NSU can be mimicked by irritation or allergies to deodorants, creams, soaps, etc. Chemical or physical irritation of the urethra can also cause NSU symptoms. A culture is the only definite way to establish the diagnosis of chlamydia caused NSU. Usually the diagnosis of NSU is made by exclusion. The following findings favor a diagnosis of NSU: (1)- A gram stain (described in the section on gonorrhea) that is negative. (2)- A culture which is negative for gonorrhea (also explained in the section on gonorrhea). (3)- No other disease such as syphilis, herpes, prostatitis, or trichomonas is present.

**CHLAMYDIA, CERVICITIS, PID, AND WOMEN:** Women usually do not have recognizable symptoms of NSU. They often are suspected of having NSU only after the male partner has been found to have the infection. NSU due to *Chlamydia trachomatis* can cause cervicitis in women who can then transmit it to the baby at the time of delivery. In the baby, this may lead to inclusion conjunctivitis (an eye infection) or pneumonia. Women with NSU can also develop pelvic inflammatory disease (PID) as a complication just as they can develop PID as a complication of gonorrhea. The cervicitis usually has a mucopurulent discharge in the cervix opening (the cervical os). Often the woman will have few in any symptoms of cervicitis. The most common symptom, if present, is a vaginal discharge. Chlamydia is one of the most common causes of PID. PID due to chlamydia is probably more likely to result in sterility than is PID due to gonorrhea. This is because the symptoms of chlamydia caused PID are often milder and therefore the infection may be present longer before treatment. There may be only a minimum amount of pain and/or vaginal discharge which can go unnoticed by many women. The extra time of delay in the treatment of chlamydia caused PID compared to the time lapse in the treatment of gonorrhea caused PID may result in more damage occurring with chlamydia. In PID, sterility results from the infection causing damage and closing of the fallopian tube.

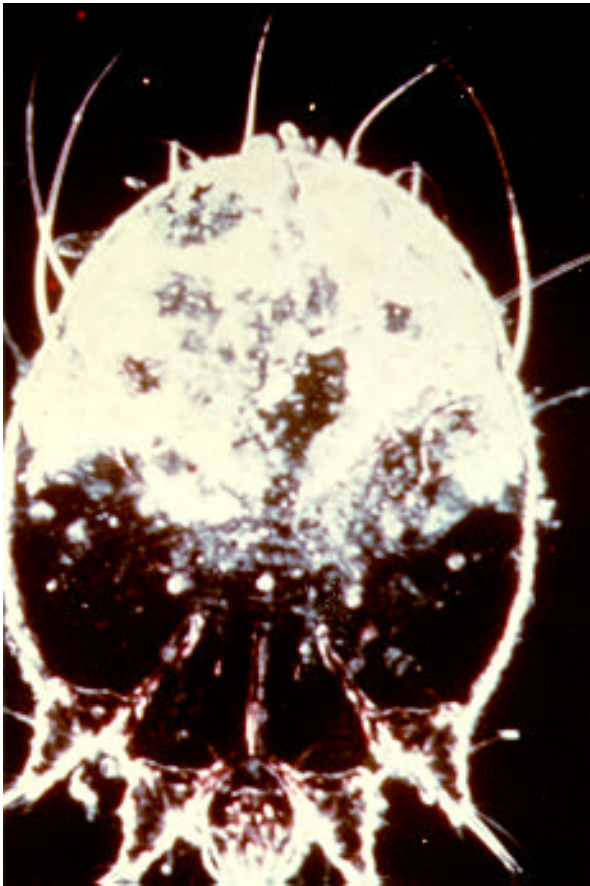
Although expensive, it is probably wise for sexually active women to have cultures performed for chlamydia at least once a year. This is even more important if future pregnancies are desired. Culturing for chlamydia

in the office is currently not a routine procedure and is expensive. A culture for *Ureaplasma urealyticum* (T-Mycoplasma) can be done routinely in the physician's office with the proper culture medium. However, most physicians' offices are not equipped with a commercial lab or and most reliable and *Ureaplasma* less expensive, and detecting these organisms new rapid antigen chlamydia. It is no less and results chlamydia in the VENEREUM and on PID in the section

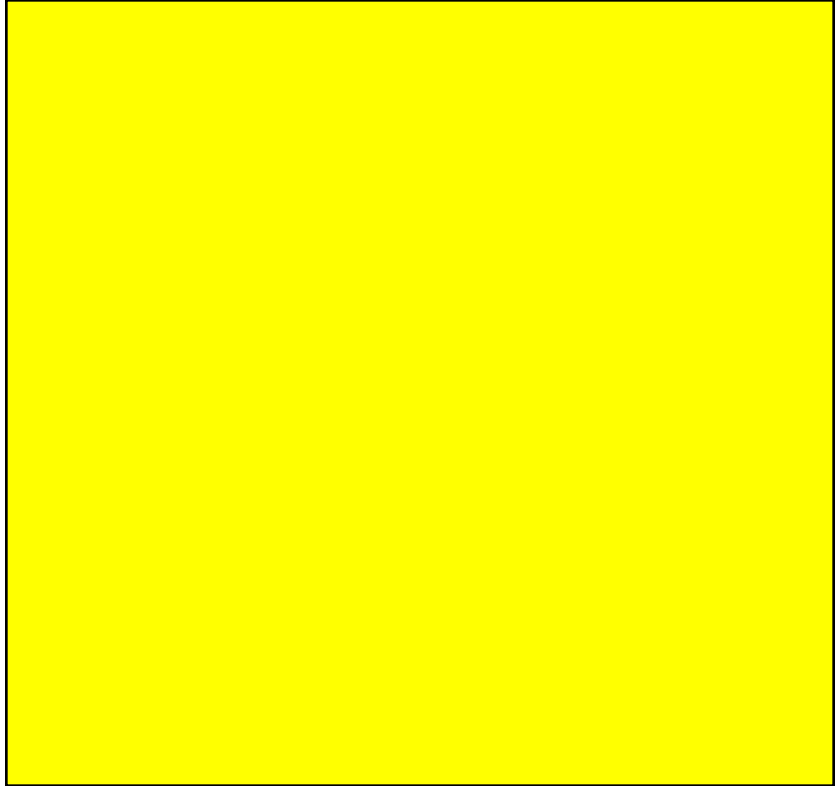
Both organisms *Chlamydia trachomatis* the cause of N gonorrhea tetracycline. The treatment with a tetracycline for 1 to 2 weeks required. If there are different antibiotic It is important to take is equally important difficult cases with antibiotics, reinfected before testing for chemical or forensic scaring as a cause require a specialist







**Microscopic appearance of the scabies mite, *Sarcoptes scabiei*.**



**An itchy skin rash on the hands caused by scabies.**

## PEDICULOSIS PUBIS

Pediculosis pubis is also known as crabs, lice, and pubic lice. Pubic lice (Phthirus pubis) are very small flea-like parasites. The lice do not burrow under the skin like the scabies mites, but remain among the pubic hairs. They feed on blood and live for about 24 hours. One female produces 5 to 10 eggs per day and appear as small white specks. They can be mistaken for flea bites. Symptoms usually appear one week and the newly hatched lice take about 8 days.

The most common symptom is intense itching which is worse at night. Transmission is through direct contact during sex or even contact with clothing, linen, and other such items. Lice can live for 24 hours off the human body but do not live longer than one month.

Head lice (Pediculus humanus capitis) and body lice (Phthirus pubis) commonly transmit pediculosis but transmission also possible, it is very rare. Lice can be found on the body or to find the only likely site is on the eyelashes.

The diagnosis is based on history and the symptoms confirmed by identification of a magnifying glass on pubic hairs.

The treatment is with permethrin (Kwell, Scabene) which is effective, but instructions should be followed. Prolonged and/or intense irritation or toxic symptoms should be avoided for use on babies, children, and nursing mothers due to the risk of symptoms. Do not use on mucous membranes. Available treatments include:

Pyrinate, R & C Shampoo, Rid liquid, Cuprex, and Triple X Pediculicide are effective also in the treatment of pediculosis. Prioderm lotion available by prescription is used for the treatment of head lice.

The lice and their eggs must be destroyed. Everyone (room mates, sexual contacts, etc.) should be

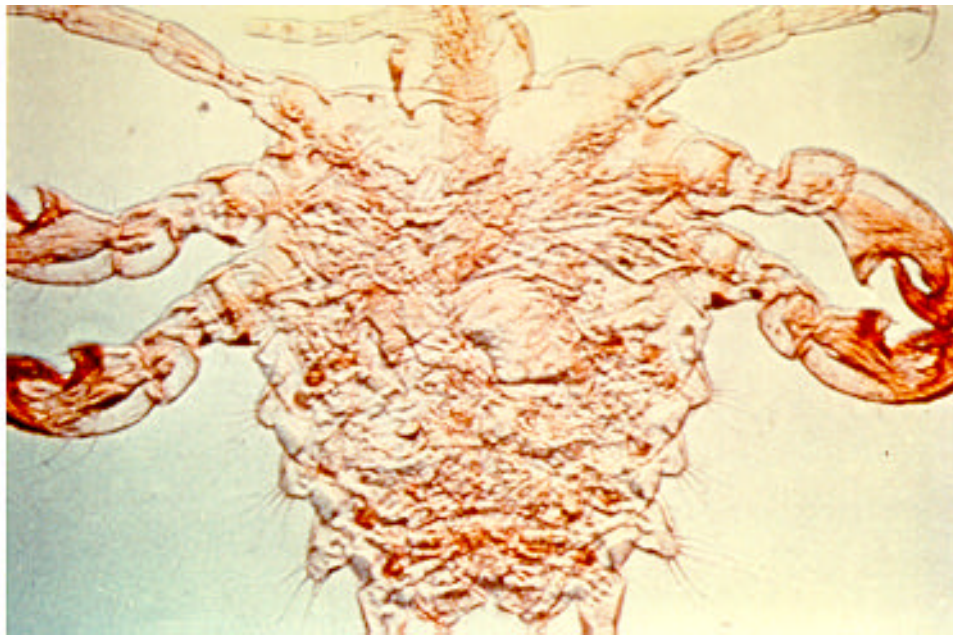
treated so as not to reinfest each other. Clothing, towels, and bed linen should be dry cleaned or machine washed with soap and hot water and dried using the hot cycle.

### TREATMENT OF PEDICULOSIS PUBIS: (1)

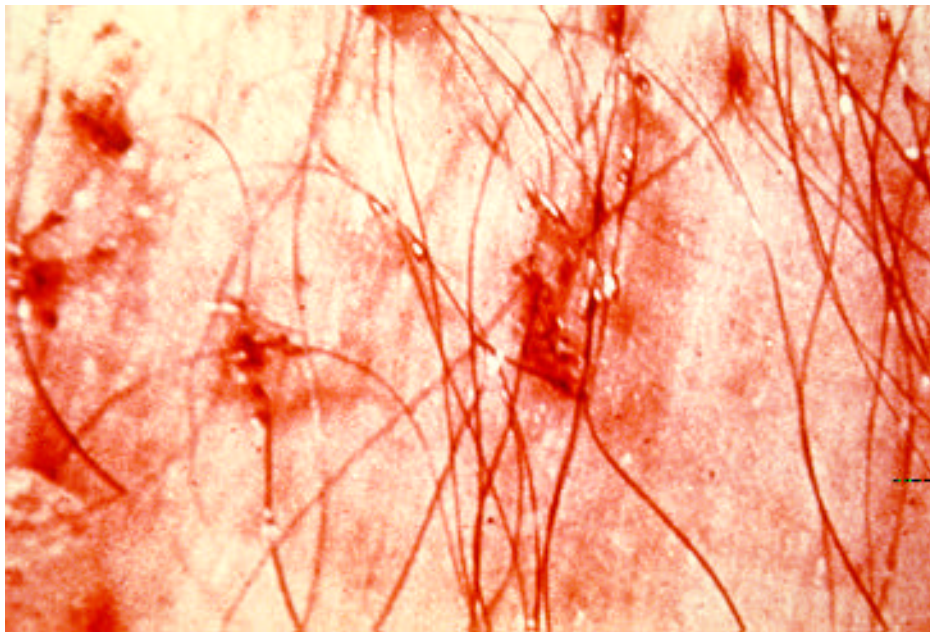
Prior to use of the medication, take a warm bath with soap and water followed by thorough drying. (2) 1% lindane Lotion and Cream---apply to infested hair areas and leave medication on for 12 hours before washing it off. 1%

for 4 to 5 days is done for 1 week. (4) After treatment is completed with a second application must be done. (6) Repeat treatment if lice are found necessary. Repeat treatment if found in the

side can be done with other treatments. Both treatments are available at your local pharmacy. These sprays are available.



**Pediculosis pubis.**  
**Microscopic appearance of the crab louse, Phthirus pubis.**



**Pediculosis pubis**  
**Pubic hair infested with lice.**

# VAGINITIS

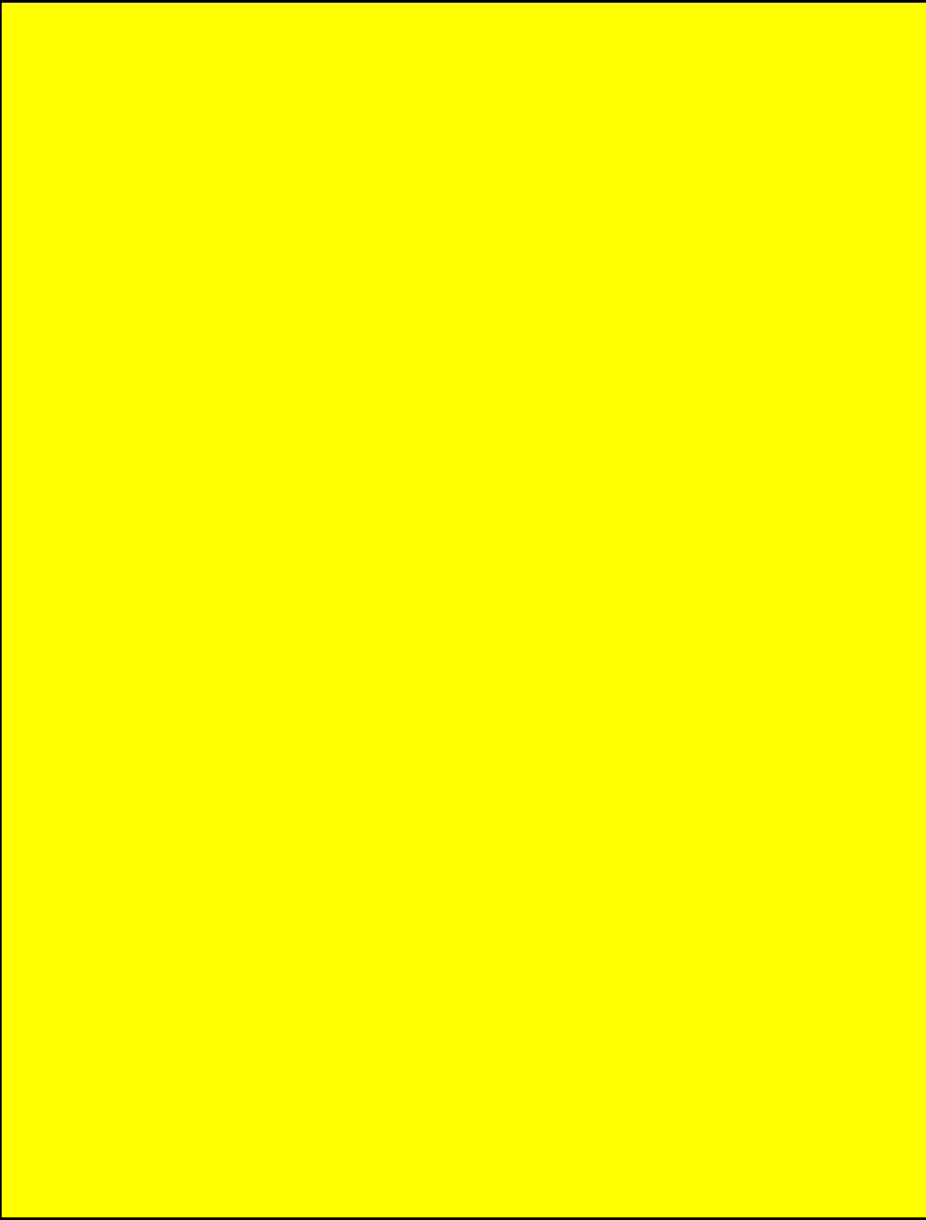
(Gardnerella, Trichomoniasis, Candidiasis )

Vaginitis is an infection or inflammation of the vagina. The infection or inflammation may remain confined to the vagina or it may progress to involve other sites such as occurs in pelvic inflammatory disease (PID). Women with vaginitis may have vaginal itching, redness, tenderness, and an aching or a burning pain occurring with or without urination. Also, women with vaginitis may have a discharge from the vagina with a variety of characteristics. The discharge may be white, yellow, or darker in color. It may be watery or it may be thick in consistency. Odors may be present. Pain during urination may also be present. The physician should be aware of the various characteristics of vaginitis. The physician should perform a pelvic examination. The physician should note the discharge as well as the results of the examination. The results are helpful in identifying the cause of the vaginitis. The patient should not "freshen up" with external douching prior to an examination for vaginitis because this can make it difficult for the physician to make a diagnosis.

There are many causes of vaginitis. The most common are bacteria, Trichomonas, Candida, and Gardnerella. Vaginitis may be due to sexual activity. Vaginitis may not necessarily be due to sexual activity. In fact, some organisms that cause vaginitis are normally found in the vagina. It should be made known to those in relation to sexually transmitted diseases, but it should not be for those who are known to be sexually active. Partners must be treated in many cases.

The character of the discharge is helpful in differentiating the presumed cause. Confirmation depends on the results of the tests. Test for gonorrhea, syphilis, and chlamydia probably also be obtained in those cases.

- Estimates of the causes of vaginitis
- Gardnerella vaginalis
  - Candida albicans
  - Trichomonas vaginalis
  - Other Causes



Gardnerella vaginalis may very well be the most common organism involved in "nonspecific vaginitis". Nonspecific vaginitis is a term that has been used as a catch-all diagnosis. Nonspecific vaginitis is actually undiagnosed vaginitis. With a thorough evaluation, a cause of nonspecific vaginitis can usually be found.

Gardnerella vaginalis (also known as Haemophilus vaginalis or Corynebacterium vaginale) is responsible for about 30% of cases of vaginitis. The incubation period is approximately one week. It is felt that other organisms may

involve Gardnerella vaginalis. About 35% of cases are sexual in origin and to have a discharge that is usually frothy. The course is a chronic one with symptoms of vaginitis. Trichomonas vaginalis is a common cause. The discharge will aid in the diagnosis. Gardnerella vaginalis. A clue to the diagnosis is the odor after the discharge. The discharge may be frothy. This is with sexual partners. The discharge is Trichomonas or Gardnerella vaginalis. The discharge is frothy because of the organism. The organism is seen on a microscope, and the discharge is frothy. The discharge may consist of a frothy white, yellow, brown, bloody, or green discharge from the vagina. The discharge does not have to be, but is often foul smelling. There may be itching and also pain and redness of the vagina and genital area. The organism may also enter the urethra and

bladder producing symptoms of a urinary tract infection (burning on urination, urinating frequently, and strong urge to urinate). Pain during sexual intercourse is occasionally present. Males may also have a slight clear discharge, itching, and pain. Both the infected males and females may have trichomoniasis without any symptoms. The effects of prolonged infections with trichomonas are not known, but investigators express caution concerning potential complications.

Microscopic examination of the discharge or of the urine will usually reveal the presence of the organism in those individuals with trichomonas infections.

Metronidazole (Flagyl) is taken orally and is the usual medication used in the treatment of trichomoniasis.

The person with trichomoniasis and his or her partner should both be treated at the same time. If the partner is not treated concurrently, the treatment is probably useless as reinfection will occur through sexual contacts. Condoms are effective for preventing trichomoniasis in pregnant women or nursing mothers, but should not be used. In such instances, local treatment is necessary to deal with the infection. Treatment includes douches with vinegar and water solutions or solutions of povidone-iodine (Betadine). Suppositories may also be used for treatment. **REMINDER:** Consult a physician in the event of self-treatment.

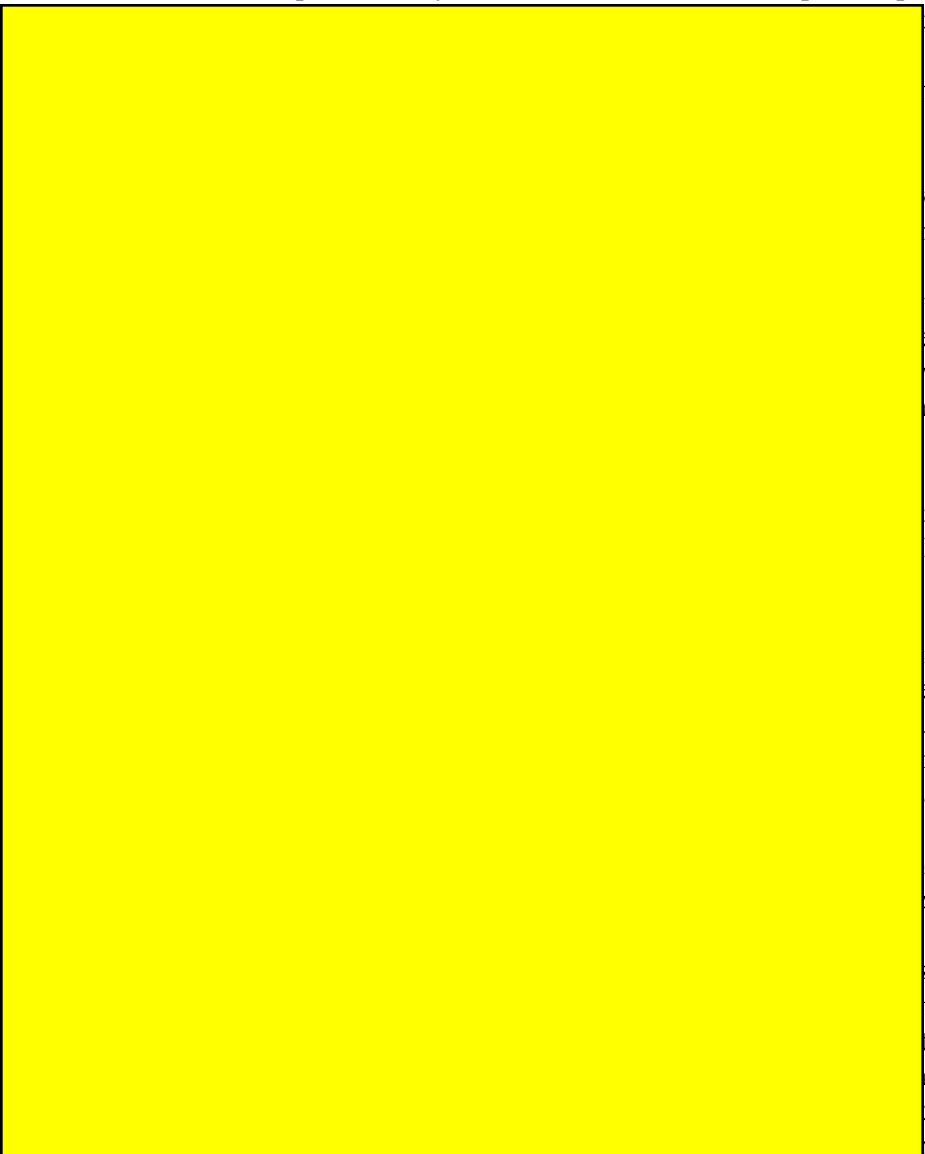
### CANDIDIASIS

Candidiasis is also known as Monilia, thrush, and yeast. This infection is caused by a fungus known as *Candida albicans*. The infection in the vagina is referred to as "yeast". It is referred to as thrush when found in the mouth of infants (NOTE: infections in infants are usually sexually acquired.). *Candida albicans* is normally present on the skin, in the vagina, in the mouth, and in the intestines without causing any noticeable problems. Some of the conditions that allow the organism to overgrow are (these conditions result in an overgrowth of the organism):

- 1- Pregnancy.
- 2- Diabetes.
- 3- Antibiotics.
- 4- Birth control pills.
- 5- Steroid medications (cortisone).
- 6- Menstruation.
- 7- Decreased body resistance.

Body resistance is decreased in poor health or with

inadequate nutrition. Moisture, warmth, and decreased ventilation promotes the growth of candida. Such things as wet clothing (bathing suits), tight clothing, synthetic underwear (nylon), and unventilated panty hose will promote the development of candida infections. Pregnancy, birth control pills, and steroid medications promote candida infections due to their effect on female hormonal levels. Candida will grow better in sugar containing environments and this explains the role of diabetes in candida infections. Also diabetes can be associated with a decrease in body resistance. Antibiotics can eliminate the normal bacteria found in the vagina. This elimination may then permit the candida to grow without the interference that is usually presented by the normal bacteria. An important point to



the infection. In the male, creams that are used in the treatment of females are also effective. Liquid drops are effective in infants with oral thrush (Again, infants are often seen with this infection and it is not sexually

acquired). For vaginal candida infections such medications as miconazole, clotrimazole, and nystatin are commonly used for at least two weeks. Recurrent vaginal candida infections are not uncommon and may be difficult to eliminate. Avoiding the predisposing factors will greatly aid in preventing candida vaginitis.

### **OTHER CAUSES OF VAGINITIS**

Infections with E. coli, gonorrhea, Streptococcus faecalis, chlamydia, mycoplasma, pinworms, ureaplasma, genital herpes, scabies, condylomata acuminata (genital warts), and tinea (fungus) can all cause vaginitis.

Chemical irritation and allergens are also a cause of vaginitis. Such things as soaps, bath oils, perfumes, sanitary pads, deodorants, douching agents, excessive douching, feminine hygiene sprays, laundry detergent residue in clothing, contraceptives (vaginal creams, foams, and gels), underclothing fabrics, and tight clothing all can cause vaginitis due to irritation. Foreign objects such as forgotten or lost vaginal tampons, intrauterine devices, and various objects that may be used in sexual activities (including saliva) have been known to cause vaginitis. Prolonged periods of wearing wet swimsuits or in hot tubs can also cause vaginitis.

Postmenopausal women can have atrophic vaginitis which is due to a decrease in the amount of female hormone (estrogen) present.

Cancer, psoriasis and excessive moisture are all capable of causing vaginitis.

# CHLAMYDIA

Chlamydia is the most common cause of sexually transmitted diseases in the United States. It is now seen as an epidemic in the U.S., where 3 to 4 million people have a chlamydia infection each year.

Chlamydiae are a large group of microorganisms which have some characteristics of both viruses and bacteria. They are obligate intracellular parasites (like viruses, they must live inside cells).

There are two species

## (1)-Chlamydia trachomatis

This species does not cause a disease but is included here because of its role in chlamydia. *C. psittaci* causes psittacosis or ornithosis. It infects many birds and is transmitted to monkeys, apes, and humans. When transmitted to humans, it causes pneumonia (lung infection) and conjunctivitis (eye infection) at various body sites. The person may be asymptomatic. There may be serious complications. This infection is transmitted by contact with birds, parrot fever. When it is transmitted to humans, it is called ornithosis. The transmission is usually from handling birds with the infected person. Transmission can also occur from infection from the contaminated environment. Human to human transmission is rare.

## (2)-Chlamydia pneumoniae

This species can be transmitted in adults and is a cause of various diseases, sequelae, and complications.

### (A) EYE (Conjunctivitis)

**Trachoma:** This eye infection can lead to blindness. Children usually get it from eye to eye by contaminated items (fingers, eye cosmetics, towels, etc.). Treatment is with tetracycline.

**Inclusion Conjunctivitis:** This eye infection is primarily a venereal infection which reaches the eye via spread from the genital tract. This occurs if contaminated fingers or objects touch the eyes or if the eyes contact the infected genital material. Infants are infected at the time of

birth during passage through the vagina. The infection is also called ophthalmia neonatorum, which is a general term for any infection of the eyes of infants. Ophthalmia neonatorum is also caused by herpes simplex virus type II, *Neisseria gonorrhoeae*, and other bacteria. The eye symptoms of inclusion conjunctivitis are usually redness, discomfort, and a discharge from the eyes. Treatment is with tetracycline or erythromycin. 1% tetracycline drops in oil is also used.

### (B) LUNG (Pneumonitis)

The infant infected with chlamydia at birth during

develop chlamydial symptoms begin in the first few days. The infant will have a cough, fever.

See the section on

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ity, epididymitis,

leum (LGV). This

can result in ectopic pregnancy, sterility, and cervical dysplasia (abnormal cells on the cervix; abnormal pap smear).

Chlamydia is usually treated with the antibiotic tetracycline. Erythromycin is used for children and pregnant women.



nodes after about a month does not seem to be changed by treatment. Treatment only prevents rectal strictures and other complications. It does not decrease lymph node pain

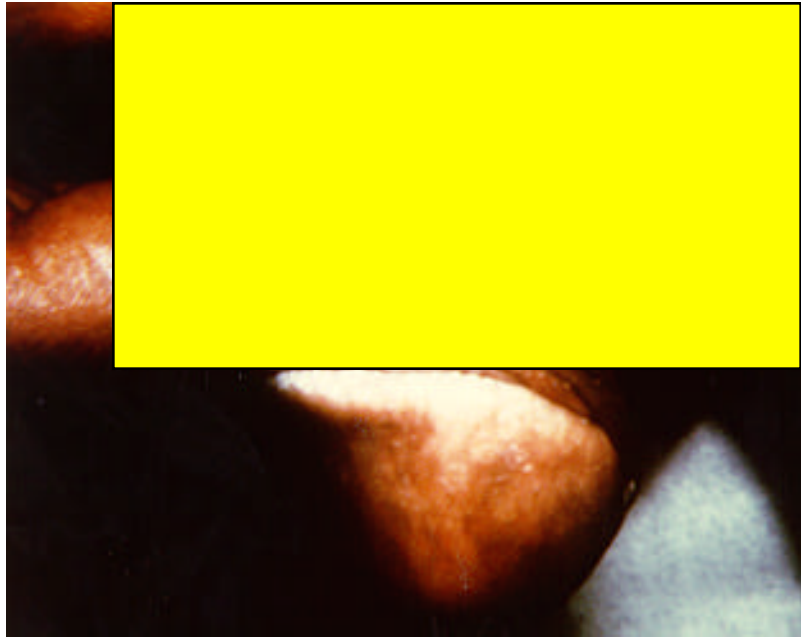
and fever. Abscessed lymph nodes must be drained with a needle and syringe.



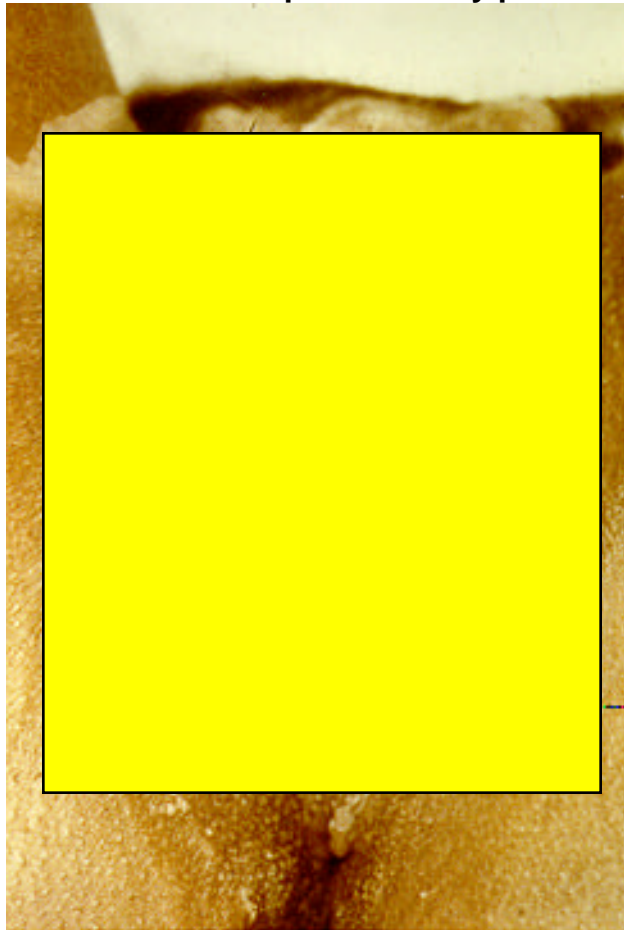
**Inguinal lymph node swelling in LGV.**



**The small soft ulcer on the penis in early penile LGV.**



**The small soft ulcer on the penis in early penile LGV.**



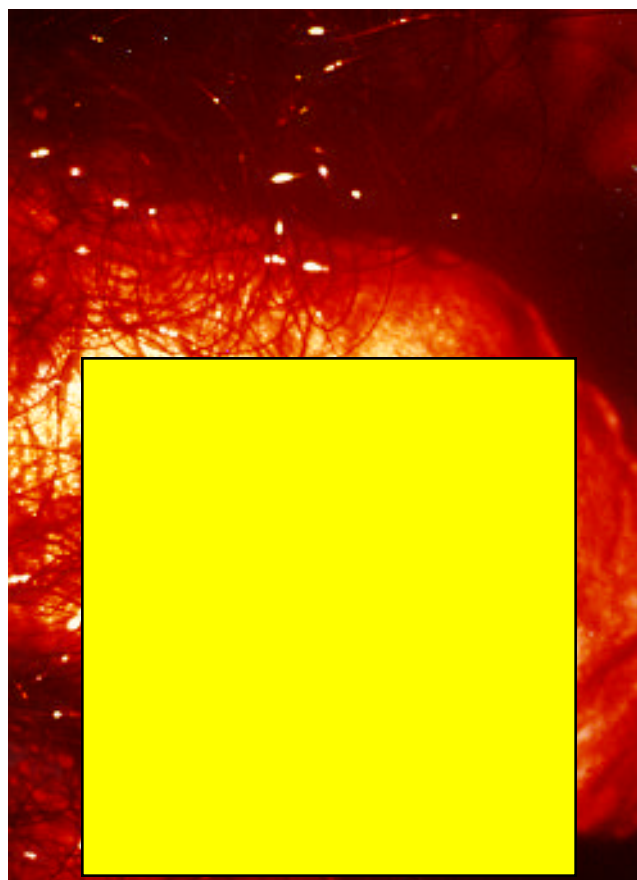
**Vaginal (genital) swelling in a woman with chronic lymphogranuloma venereum (LGV).**

## MOLLUSCUM CONTAGIOSUM

Molluscum Contagiosum is a virus (poxvirus) infection limited to the skin and mucous membranes. It is seen mostly in children where it is nonsexually transmitted by direct contact usually during play. In children the lesions are usually seen on the face, arms, chest, and legs as these are the common areas of direct contact. In older persons, sexual transmission is frequently responsible for the lesions which tend to be on the genital area. Autoinoculation is also possible by scratching and exposing the contents of the lesions to the hands.

The lesions of molluscum contagiosum are waxy, smooth, firm nodules or papules with each having a depression (umbilication) in the center. The lesions begin very small and grow slowly to around 5 millimeters in size. Squeezing a lesion causes the release of a milky white substance containing the poxvirus. There are usually many lesions in the affected area. The lesions may be mistaken for blisters or for herpes in those that are unfamiliar with their appearance.

The treatment of molluscum contagiosum is electrodesiccation or curettage (expression and removal of the contents) of each nodule. Eventual resolution of the lesions without scarring will occur without treatment. Each lesion probably remains for about 2 months. Lesions may be present for up to 3 years. Autoinoculation may result in the continued appearance of new lesions while older lesions are resolving.



**The lesions of molluscum contagiosum on the penis. Note the indentation in the center of each lesion.**

# CHANCROID

the lesions, and the response to treatment. The stains and cultures are not as easily obtained in those with chancroid as they are in those with gonorrhea.

The treatment of chancroid involves the use of antibiotics both orally and topically. The pus-filled masses

Chancroid is not a STD of great numbers. In

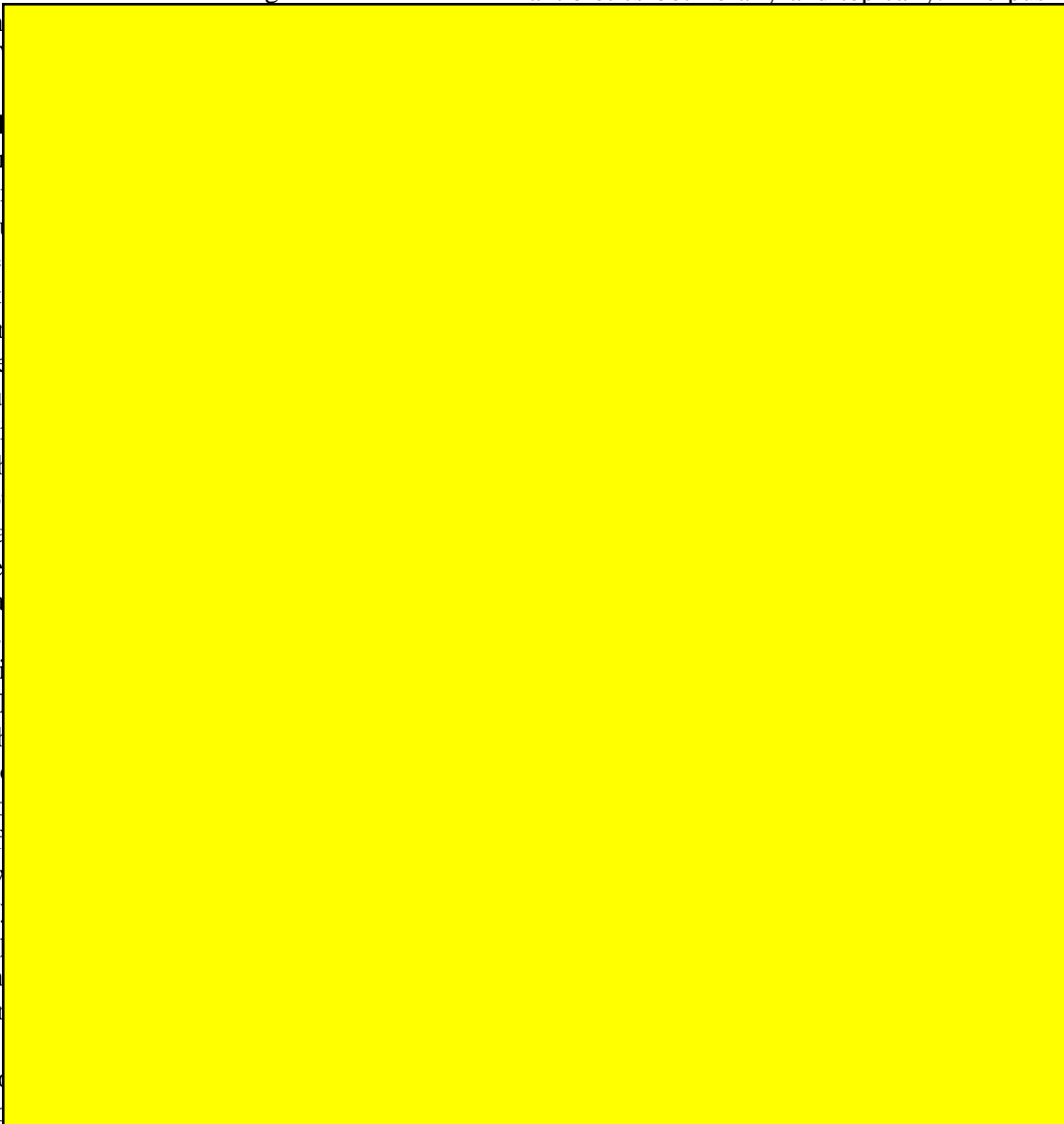
previous years the cases reported. T but it still seems of the other ST outbreaks of cha common than go than lymphogran In other countrie the top of the list Hemophilus duc than it is in wome

The incu After the incubat the site where th progresses to a p The ulcer is usua be found on othe be one or severa may contain pus enlarges, becomi appearing edge. T the ulcer of syph hard, has a bad painful, and c characteristics of lymph glands v individuals. Man the involved lym will become pain the ulcer appear merge and form later rupture out leaving a large c

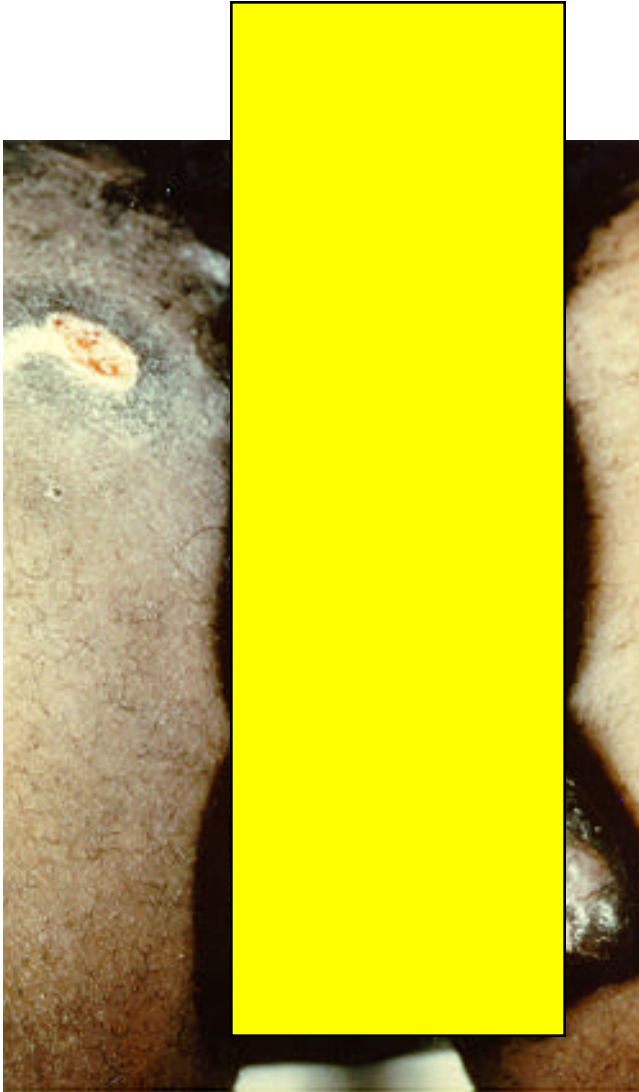
open area may become infected with other bacteria. Lack of cleanliness is felt to also contribute to the prevalence of chancroid.

Diagnostic problems with chancroid include difficulty in culturing the agent responsible for the disease and the possible confusion of the lesion of chancroid with the lesions of primary syphilis, herpes, or lymphogranuloma venereum. Because chancroid may be confused with other STDs, the person must have studies not only for chancroid, but also studies for the possibility of syphilis, herpes, lymphogranuloma venereum, and granuloma inguinale. The diagnosis of chancroid is commonly based on the elimination of the other possible STDs, the appearance of

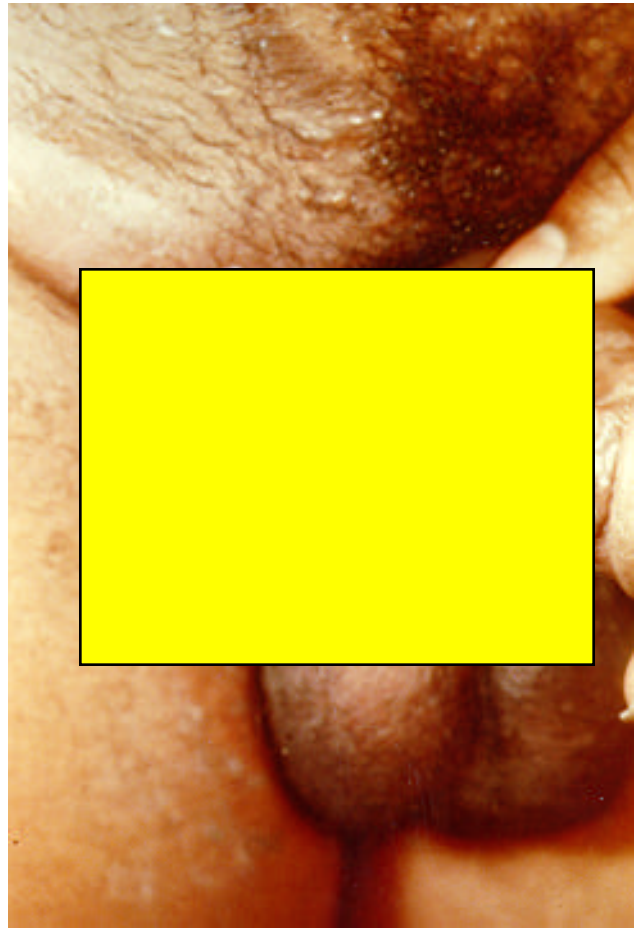
ed it should r and other tion of cool rea is then containing Frequent



**The sore (ulcer) of chancroid on the penis.**



**Chancroid with severe and late changes.**

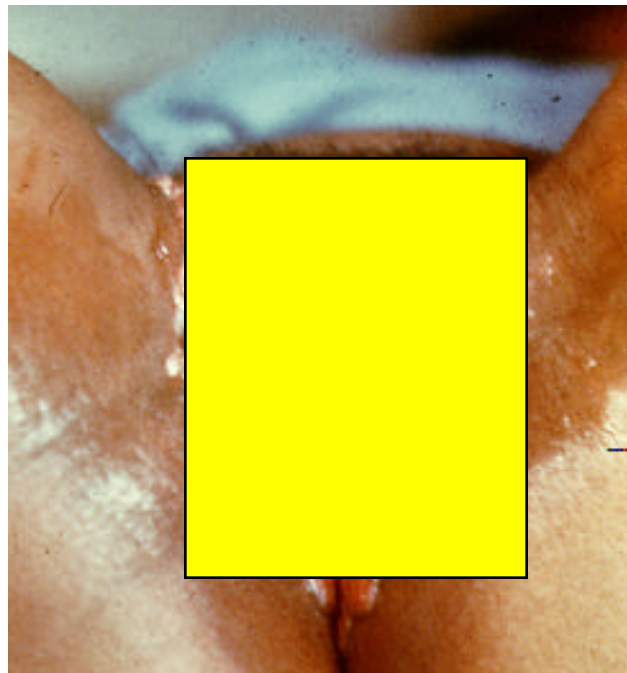


**Inguinal lymph node swelling and penile sore in a man with chancroid.**





**The lesions of granuloma inguinale in the male.**



**The lesions of granuloma inguinale in the female**

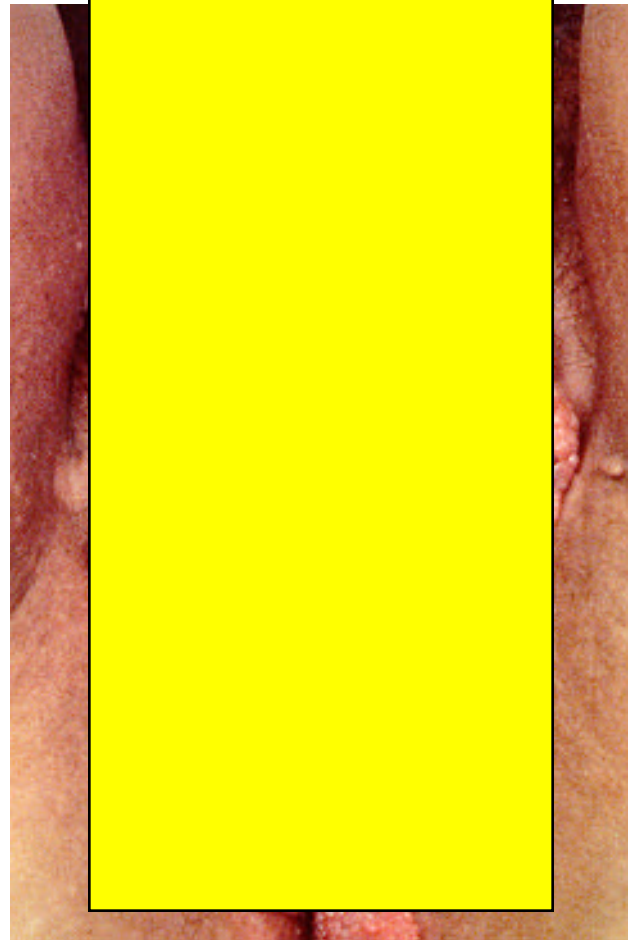
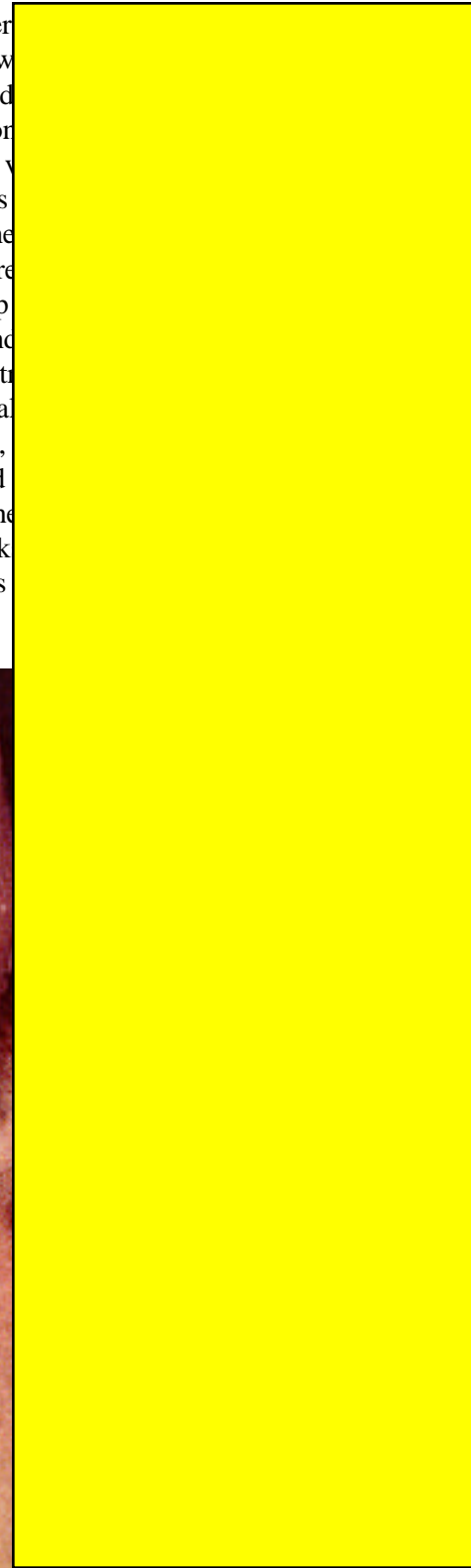
# CONDYLOMATA ACUMINATA

Condylomata acuminata is the name of the venereal wart which is caused by a human papilloma virus. There are 1 million new cases each year. The predominant mode of transmission is by sexual contact. The chance of transmission by sexual contact with an infected person is greater than 60%. The incubation period of condylomata acuminata is usually 2 to 3 months but may be only 2 weeks or up to 2 years.

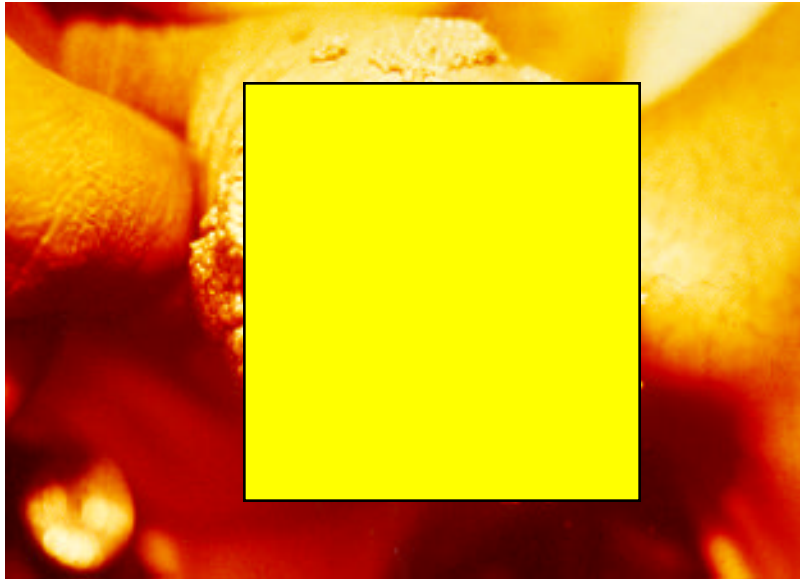
The common warts found on the hands or face and neck, the plantar warts found on the feet, and the venereal warts found on the genital region are all probably caused by the same virus or at least a closely related virus. The warts tend to differ in appearance depending on their location and on the presence or absence of moisture. When found on relatively hard and dry areas such as the distal part of the penis, the warts are small and hard much like they appear on the fingers or toes. On moist areas such as the inguinal folds and the anal area, the warts appear larger, softer, and cauliflower-like. They may bleed easily and are painless. Condylomata acuminata should not be confused with condylitis (gonorrheal proctitis).

The treatment of condylomata acuminata is varied and difficult. For the person with condylomata acuminata, the area should be kept clean and dry. The warts can become infected with bacteria and require antibiotics for treatment. They may be frozen and destroyed with liquid nitrogen, burned off with an electrical needle, or removed with surgical removal of the warts. With most of the treatments it is common for warts to reappear and require retreatment. 5% podophyllin in compound tincture of benzoin is the first treatment used on external warts. Podophyllin is useful and is applied directly to the warts. Multiple applications of podophyllin will be necessary. It must be applied carefully because of its toxicity. The use of podophyllin on a vaginal wart, may result in absorption and cause vomiting, diarrhea, dizziness and symptoms of poisoning. Podophyllin can also cause intense irritation if applied onto an area in large amounts or if it remains on lesions for prolonged periods. Podophyllin that is required and the length of time that it should be allowed to remain on the lesions can be difficult to judge. Generally, the podophyllin should be washed off with soap and water

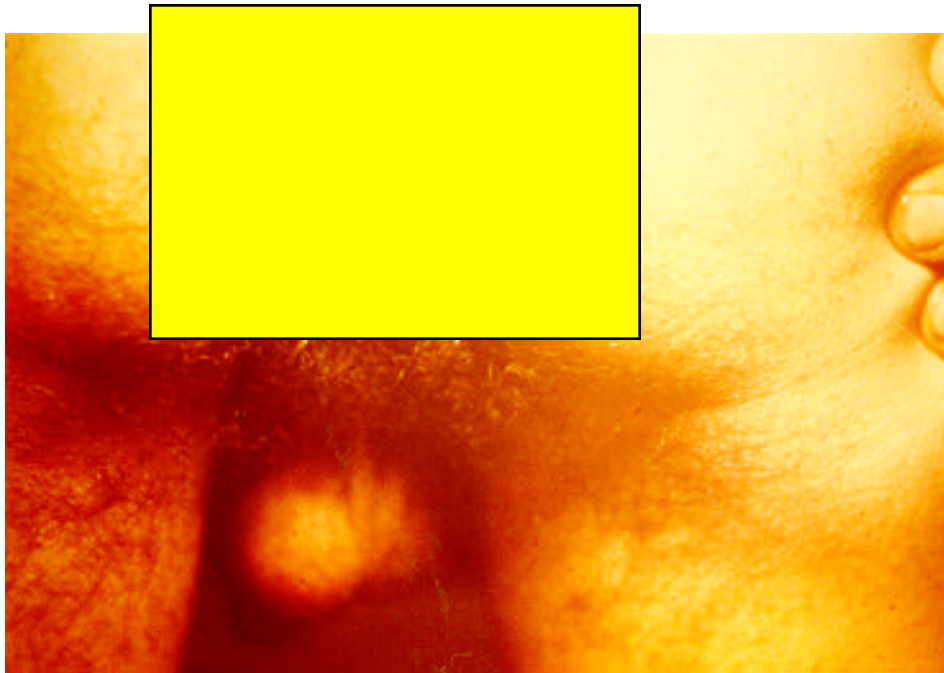
2-3 hours after days and the warts size at the end of self-application of the many warts. Podophyllin is a caustic agent and it can harm the normal tissue. It should have been removed from the cervix, a Pap smear should be done, and treatments and procedures should be decided which to use. It should be noted that it may recur again that a person should have a complete examination of the warts, and if they are not completed, check them every 6 weeks for venereal warts.



**condylomata acuminata**  
**Venereal warts on the vagina.**



**condylomata acuminata**  
**Venereal warts on the penis.**



**condylomata acuminata**  
**Venereal warts on the anus.**

# REITER'S SYNDROME

Reiter's syndrome is named after the German physician, Hans Reiter, who spent many years studying the disease. In 1916, he described a patient with conjunctivitis, arthritis, and urethritis. These three findings became known as the classic triad of Reiter's syndrome. Conjunctivitis is an infection or irritation of the eyes which causes an inflammation and b... also be drainage fro... and swelling on a... symptom of Reiter... involved are the kn... usually not involv... Most of those wi... deformities, but so... Urethritis may be c... or it may consist... urethral discharge. syndrome are cystit...

Many case... episode of diarrhea... transmitted. These... describe two forms...

- (1) **DYSEN**... cases o...
- (2) **VENEI**... after pr...

The two fo... to the mode of or... disease. The diseas...

The sympt... the same time or... diarrhea or se... conjunctivitis, and... episode of Reiter's... months. Recurrence... Reiter's syndrome. ... only 3 months or it... are usually milder... the initial episode.

The complete triad of Reiter's syndrome (conjunctivitis, arthritis, and urethritis) is not always present. One, two, or all three symptoms may be present. Other characteristics of the disease that may also be present are:

(A) **CIRCINATE BALANITIS** --- In uncircumcised individuals, this lesion appears as small moist ulcerated areas which progress to papules with clear centers and scaly borders. In circumcised individuals this lesion appears much like the dermatitis (keratoderma blennorrhagica) of the skin, hands, and feet.

**BLENNORRHAGICA** --- Small reddened areas which are generally yellowish... to form large thicken... usually heal within a few...

--- This consists of small... on the lips. Redness may...

--- Other symptoms such... (type of eye inflammation)

For Reiter's syndrome has... Mycoplasma organisms... are not any blood tests, ... used to diagnose Reiter's... physical examination must... disease. Arthritis due to... an alternative to Reiter's... cases of Reiter's syndrome... is, gonorrhea arthritis, or... rheumatoid arthritis.

(immune system) blood... en, that links a genetic... e. HLA-B27, an inherited... en in those with Reiter's... population. Up to 80% of... for HLA-B27 while only... the HLA-B27 antigen. It... ssing HLA-B27 antigen... Reiter's syndrome after... agents (Chlamydia?, Mycoplasma?) such as in intestinal or urinary tract infections. Reiter's syndrome may not really be a sexually transmitted disease, but sexual contact may be one of the ways to trigger the onset of the disease in susceptible persons.

The treatment of Reiter's syndrome is with analgesics and anti-inflammatory medications such as aspirin and indomethacin. Bed rest will help the knees and

feet but this must not be complete bed rest as such inactivity will promote muscle wasting and contractures. Physical therapy should be used to help those with Reiter's syndrome. Heat to involved areas and professionally prescribed exercises will aid in the relief of pain, the prevention of muscle contractures, and the maintenance of muscles. Antibiotics may be needed if other infections are present.

# ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

Worldwide, more than 1 million adults and 500,000 children have developed AIDS since 1981. In the 1990's, a 10 fold increase is expected. In the United States, estimates are that there are over 1 million individuals infected with the AIDS virus that do not have symptoms. It is projected that AIDS will develop in 54 percent of these infected individuals within 10 years of the infection.

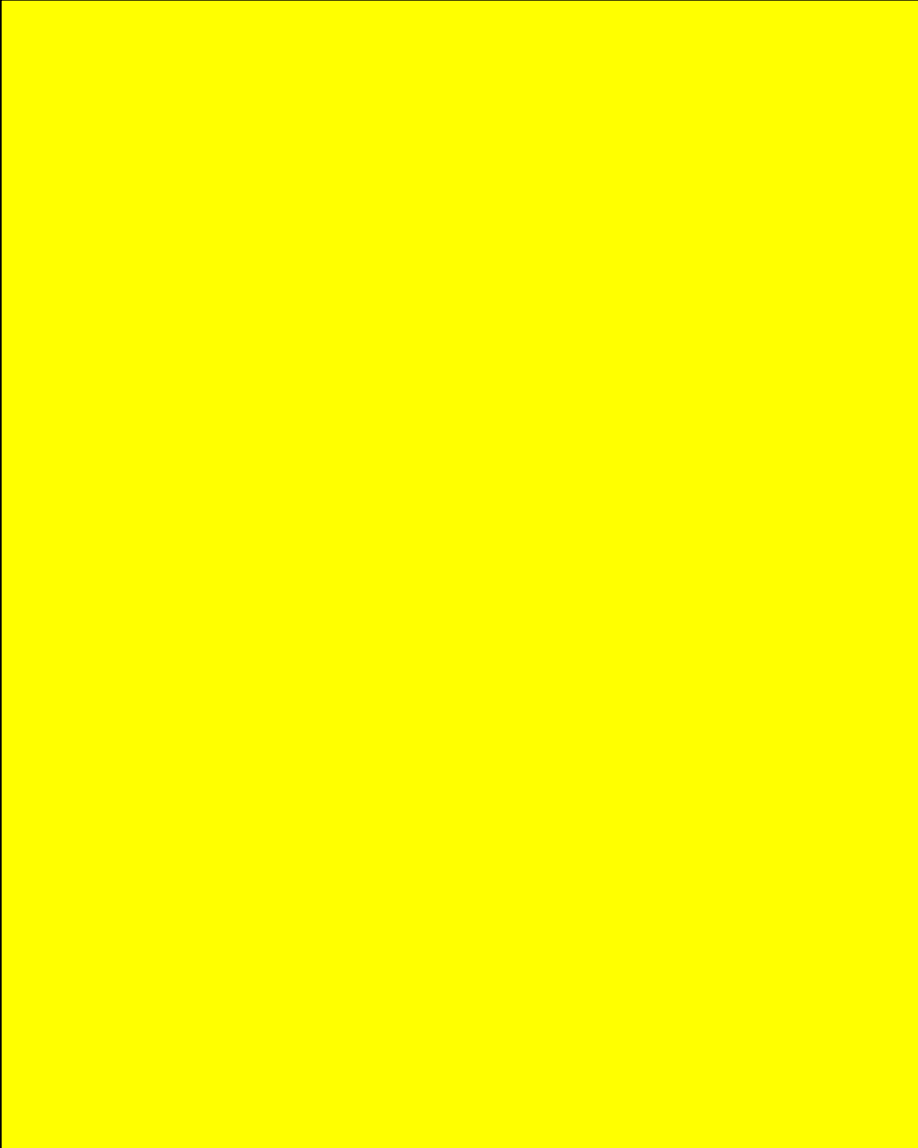
Anyone can get AIDS and it is not as simple to "catch", but unless defined, many feel that continued unchecked behavior drastically increase the chance of infection. The seriousness of AIDS has been underestimated, but many health officials and the public have a strong and definite program against it.

Although casual contact is not thought to transmit AIDS, the general public has almost reached the level of hysteria caused by a lack of understanding of the probability that until a definite treatment with AIDS will die, any intelligent person's fear of AIDS. However, the universal fear of AIDS may only increase as the AIDS virus has been found in almost all body fluids. Also, those which are contracting AIDS in current high risk groups are gaining a better understanding of the dangers, a person can use that knowledge to reduce anxiety and risks. They can then protect themselves and to decrease the risk of AIDS.

AIDS was first reported in 1981. This illness involves a failure of the immune system, thereby leaving the body susceptible to opportunistic infections and illnesses. AIDS is transmitted when infected blood, semen, or other body fluids comes in contact with another person's body fluids particularly (a)-through small breaks in the skin, (b)-from anus during sexual contact, (c)-from infected blood, (d)-from breast feeding transmission from mother to baby, (e)-during or before birth from mother to baby, or (f)-from IV drug use with contaminated needles. The AIDS virus destroys the immune system and the body is then not able to defend against organisms which would cause few problems in a person with a normal immune system. The failure of the

immune system involves the T-lymphocytes (a type of white blood cell) which protects against some viruses, fungi, parasites, and other types of organisms which attack the cells of the body. Those with AIDS not only have less of the T-lymphocytes, but those T-lymphocytes that they do have function poorly.

The cause of AIDS is a human retrovirus known as HIV (Human Immunodeficiency Virus). The virus has also been referred to as HTLV-III (Human T-cell Leukemia Virus Type III), LAV (Lymphadenopathy-Associated Virus, and ARV (AIDS-Related Virus). In someone infected with HIV, the virus has been found in many of



tears, and  
temperature  
direct contact  
and infect  
be a large  
infection. The  
"surface" is  
chance of  
or IV drug  
with (a)-  
water, (b)-  
detergents,  
baths and spas  
chemicals  
AIDS virus  
possible AIDS  
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infections in

found in saliva,  
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d with the  
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with AIDS  
also shaking  
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of large virus exposure before someone becomes infected. It is probable that prolonged or intimate contact is required to transmit the virus.

The incubation period of AIDS is not definitely known, but there are suggestions that a range of from 4 months to 2 years (maybe up to 5 years) may pass between the time of exposure and the development of symptoms.

Nonspecific symptoms such as flu-like symptoms, fever, fatigue (tiredness), persistent diarrhea, abdominal cramps, rashes, malaise, persistent cough, shortness of breath, loss of appetite, weight loss, night sweats, and lymph node swelling may be present. These nonspecific symptoms can occur in common illnesses such as a cold or influenza. With AIDS, however, these symptoms will continue for months or years, and may be more severe, prior to the development of unusual illnesses such as Kaposi's sarcoma or Pneumocystis carinii pneumonia. Other symptoms sometimes seen with AIDS are seizures, problems with coordination, and "thinking" problems.

The majority of those with Pneumocystis carinii pneumonia. Some of the persons with AIDS. Pneumocystis carinii pneumonia are not new diseases but they are now to their occurrence in those with AIDS.

Kaposi's sarcoma is a weight loss, a low grade fever, and resembling a bruise which enlarges internal organs. Previously, primarily found in elderly men which is in contrast to the high frequency with Kaposi's sarcoma in AIDS.

Pneumocystis carinii is lung, causes pneumonia. This found only in those who were vulnerable those who were on medication immune system. The symptoms are in a severe pneumonia (fever, breath).

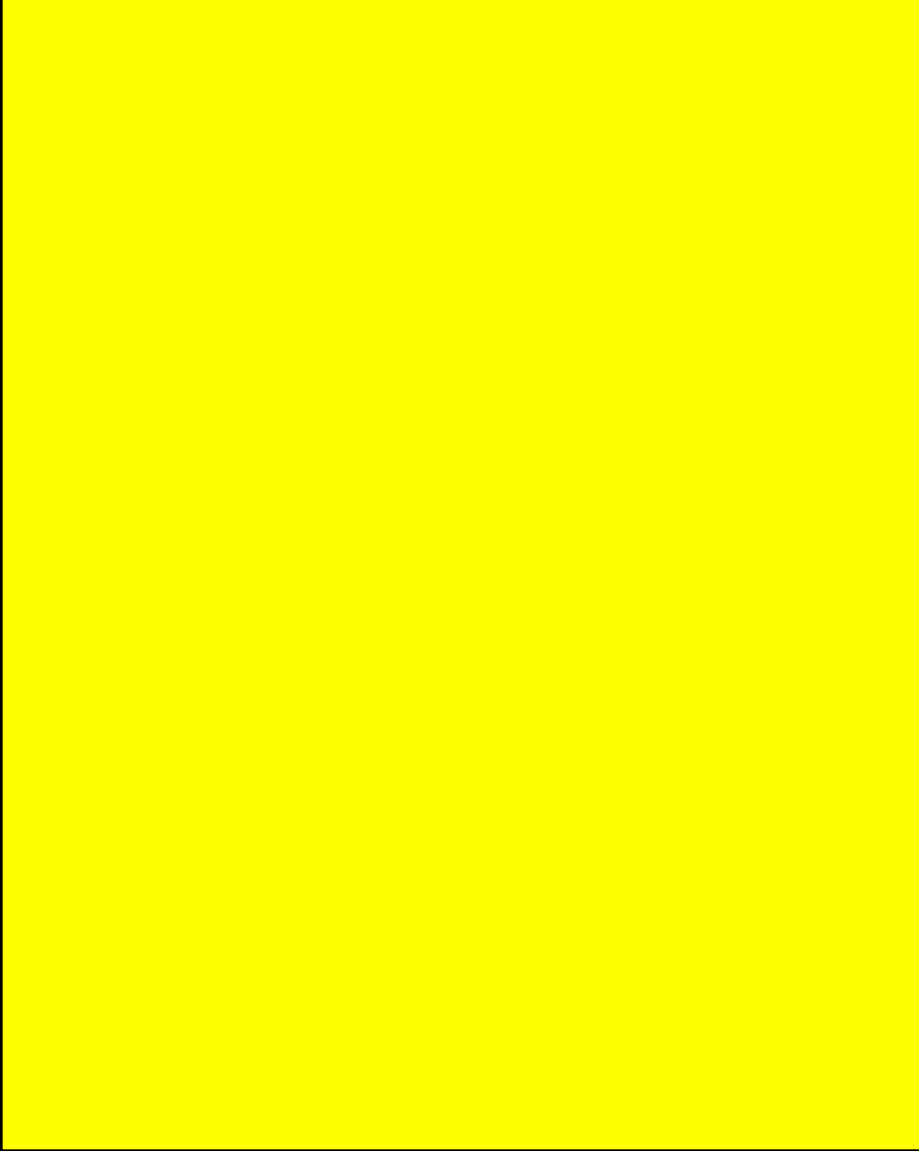
Other opportunistic infections reported in persons with Nocardiosis, Cytomegalovirus, Histoplasma capsulatum, Aspergillus Mycobacterium avium-intracellulare albicans, Cryptosporidium, Toxoplasma organisms, and Herpes simplex.

AIDS-Related Complex illnesses relating to AIDS, but the have AIDS. It consists of such as swelling, low blood counts, weight loss, viral infections, fever, nonspecific symptoms. The category of AIDS-Related Complex may be eliminated in the future and simply be categorized as AIDS or HIV infection.

Most of the persons with AIDS have been found in New York, San Francisco, Miami, and Los Angeles but many other states and countries are reporting increasing numbers of persons with AIDS. Presently there is no cure

for AIDS and the disease is fatal. Most patients with AIDS die within ten years. From June 1, 1981 through September 1992, there were 242,146 reported cases of AIDS. 160,372 of those reported cases have died. The death rate is at least 60% and may be over 70%. More than 85% of patients diagnosed before 1986 have died. The number of cases reported each 6 month period has been increasing. During 1988 an average of 88 cases of AIDS were reported each day.

Most of the persons with AIDS are homosexual or bisexual males with multiple sexual partners. AIDS has been reported in heterosexual males and females that are



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men (8% of use).

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with AIDS drugs, 18%

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11% were nts, and 8%

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concern because the current number of AIDS cases due to heterosexual transmission is expected to have a significant increase in the future. Currently heterosexual transmission is mainly to women having sex with IV drug users. It is felt that heterosexual transmission to men is by contact with women (usually prostitutes) infected by IV drug use.

Anal sex may be an easier way to transmit the



protease inhibitors ritonavir and indinavir (Crixivan).

Research for a vaccine continues and shows progress. Realistically, a vaccine, if successful, may not be available for many years. But researchers have done the seemingly impossible before when faced with potential devastating crises.

While it is not a cure, the drug zidovudine (AZT; azidothymidine) has been approved for use in AIDS. Its trade name is Retrovir. In a study of the drug, AIDS patients with pneumocystis carinii pneumonia treated with zidovudine gained weight, stamina, and had increased resistance to opportunistic infections. There were fewer deaths and a lower incidence of opportunistic infections in the group that received zidovudine than in the group that did not receive zidovudine. Zidovudine also improves neurologic and immunologic function and reduces the severity of opportunistic infections. Side effects are not currently known but include itching, headache, rash, nausea, and a decrease in white blood cells. Treatment with zidovudine costs about \$10,000 a year. The estimated cost of medical care for an AIDS patient is \$10,000 a year. The estimated cost of medical care, medications, and outpatient visits is \$10,000 a year.

Potent combinations of drugs promise that HIV can be eradicated. Recent studies have shown that protease inhibitors, such as AZT, 3TC, ddI, or ddC, reduce the level of virus in the blood to a level that is not detectable. The significance of this finding is promising.

### AIDS AND THE AIDS BLOOD TEST

The cause of AIDS is the Human Immunodeficiency Virus (HIV). HIV will produce antibodies in the blood that can be detected by this virus. The AIDS blood test will detect these antibodies. Technically, the blood test is called an Enzyme-Linked Immunosorbent Assay (ELISA) and is referred to by this name. It is estimated that 1 million Americans have the HIV antibody, indicating that they have been exposed to the AIDS virus. They are just as likely to be able to transmit the virus as those with AIDS. This is compounded by the fact that many of them are not aware that they have the virus. They have not developed AIDS but still may develop the disease.

The AIDS blood test could be positive as early as 2 to 3 months after infection (rarely) but it is usually positive by 6 months after infection. Some feel that the test may be positive after only 4 to 6 weeks after infection but currently

a more reasonable time period is 6 months.

The AIDS test is used mainly to screen blood donors. Those blood donors with positive tests will not be accepted for blood donations. Currently only about 3% of AIDS patients contracted the disorder from blood products or blood transfusions. This test decreases but does not eliminate the chance, which is already very very low, of AIDS being transmitted by blood transfusions. The blood supply is still not totally safe because the AIDS blood test may still be negative up to 6 months after contracting the virus. That infected person's blood could be accepted for blood donation. However, it must be emphasized that the



very small, There are many contacts with the AIDS virus that the person's immune system can handle. The AIDS blood test does NOT detect the AIDS virus but not for diagnostic purposes. **THE AIDS BLOOD TEST FOR HIV** is used for diagnostic purposes, but not for screening blood donors. There are not many contacts with the AIDS virus that the person's immune system can handle. A negative AIDS blood test does not mean that the person is not infected with the virus. The AIDS blood test is used for diagnostic purposes, but not for screening blood donors. The AIDS blood test is used for diagnostic purposes, but not for screening blood donors.

### POSITIVE AIDS BLOOD TEST

Persons with a positive test should inform their physician and dentist so that appropriate precautions may be taken. In a person without symptoms of AIDS who has a positive AIDS blood test, it is not currently possible to ascertain by lab tests if that particularly person will or will not eventually develop AIDS. Although it is uncertain and changing as more information becomes available, the

current estimated risk of developing AIDS if the AIDS blood test is positive (HIV infection) is 30% to 50%.

Individuals with a positive AIDS antibody blood test should not donate blood, sperm, tissue, or body organs. They should limit sexual contact and also inform their sexual partners so that appropriate measures can be taken to prevent the transmission of the virus (such as condoms which may be used for sexual intercourse, but not for sexual contact (abused), no exchange of body fluids, and open-mouth sexual contact should be avoided). They should not donate blood (too often). A woman with a positive AIDS blood test should not partner with a man who has some infantile mothers. People who have a 30% risk of AIDS blood test is positive should maintain a list of items.

People who usually need and casual spread the virus, etc. not work, etc. not

It is discovering to cope with what the person not mean. other psychiatric have available psychiatric

If you see a doctor additional tests

concerning any possible exposures you may have had to the AIDS virus. Your doctor will decide which additional tests are needed but generally the following tests are helpful:

- (1) A repeat of the ELISA AIDS blood test.
- (2) Western blot testing. This is a blood test for HIV antibodies that is more specific (but not absolutely specific) if it is positive for the AIDS virus.
- (3) A complete blood count, including an absolute lymph count and platelet count.
- (4) Gamma globulin levels and serum protein electrophoresis.

- (5) Hepatitis B blood tests.
- (6) CD4+ T cells count.
- (7) Routine blood chemistries (sodium, liver enzymes, potassium, etc.) including gamma globulin levels.
- (8) Tests for other sexually transmitted diseases (VDRL, gonorrhea culture, etc.).
- (9) Tests of immune function.

(10) Stool tests such as trichophyton, candida, and specific tests (e.g. viral culture) findings and the availability of the

who may have been infected, as a person having a positive blood test, AIDS antibodies. Your doctor will testing is needed but generally "sharing" drug users, and those who may be contaminated with blood such may need testing.

If the information pertaining to a (1) The blood test is primarily a test donated for blood transfusions. A test to determine if a person test does not indicate that a person test does not indicate that a person positive test does not definitely the blood. (6) In a person with a potential for transmitting the virus to reasons persons with a positive infectious.

lines for a positive test result may should obtain the latest AIDS testable at the various testing sites.

ON AIDS IS CONSTANTLY AND CHANGED DAILY. IT IS THAT SOME OF THE AIDS PRESENTED IN THIS IS OUTDATED. STILL, THIS INFORMATION SHOULD BE HELPFUL.



**The dark skin lesions of Kaposi's sarcoma, one of the illnesses that occurs in AIDS.**



**The dark skin lesions of Kaposi's sarcoma, one of the illnesses that occurs in AIDS.**

## OTHER STDs

Other diseases can be considered STDs due to their occasional transmission by sexual activity. Shigellosis and amebiasis are caused by bacteria (*Shigella* and *Entamoeba*) found in and transmitted by the stools or bowel excretions of someone that has either illness. The increase of orogenital sexual activity makes transmission through sexual contact more likely and more common. Hepatitis B has also been found to be transmitted by sexual contact due to the virus being found in the semen and vaginal secretions (this is not the only way by which hepatitis is transmitted).

Homosexual men are at high risk not only for the common sexually transmitted diseases, but they are at a much higher risk than the general population for the uncommon sexually transmitted diseases discussed in this section.

### SHIGELLOSIS

This is an infection with the bacteria *Shigella* (of which there are several species). The symptoms are due to inflammation in the intestines caused by the bacteria. Diarrhea with blood, mucus, and pus is common. Stomach cramps, fever, and chills may also be present. A common method of transmission is by close personal contact with contaminated hands. Transmission by contaminated food and water is also common. Venereal transmission is possible.

### AMEBIASIS

This infection is due to the organism *Entamoeba histolytica*. Amebiasis may produce abdominal pains and diarrhea with blood and mucus. The organism may also invade other body organs such as the liver and lungs. Transmission is usually by contaminated food and water. Venereal transmission is possible.

## HEPATITIS B

Hepatitis is an inflammation of the liver which impairs the normal function of the liver. This liver inflammation is due to a specific virus. The impaired liver function results in dark colored urine, light colored stools, a yellowish tint to the skin and eyes, muscle and joint aches, fever, and generalized malaise. Transmission is mainly by sexual contact or contaminated needles used in IV drug abuse.

### CYTOMEGALOVIRUS (CMV)

This is a virus of the herpes group. This virus can cause an asymptomatic infection, an encephalitis in infants, or it can cause mononucleosis-like symptoms. Most people develop antibodies to cytomegalovirus after an asymptomatic or mild infection during childhood or early adulthood. About 65% of the United States population have antibodies to CMV indicating a previous infection with CMV. It rarely causes symptoms or problems in children, but can result in severe problems in newborn infants. Most children usually acquire CMV from other children or from parents during close contact. One of the main concerns about CMV is infection during pregnancy. In pregnant women that become infected with CMV, up to 10% of the babies born will have abnormalities such as deafness and/or mental retardation. Pregnant women with children in daycare have an increased chance of contracting CMV from their children who have contracted CMV from other children in daycare. Transmission requires close contact. Transmission is possible by blood transfusions, kissing and sexual contact. The virus has been found in blood, saliva, stool, urine, semen, women breast milk, and cervical (vaginal) secretions. In adults, transmission is mainly by sexual contact. Currently, there is no treatment for CMV. In closing, it should be noted that 90% of pregnant women that have CMV during pregnancy will have normal babies.

## GROUP B STREPTOCOCCUS

This infection does not commonly cause disease in humans. Approximately 5% of normal individuals have group B streptococcus in their throat. These streptococci are increasingly being found in the male and female genital tracts. They have also been increasingly found to be a cause of infant infection.

Giardiasis is caused by intestinal parasites in the United States (Giardia lamblia). It causes abdominal distention and is transmitted in food contaminated with infected stool. It is also a venereal transmission. Those found to have it should be treated.

Campylobacter (Campylobacter fetus) is now recognized as a cause of bacterial diarrhea. Several subspecies known as C. jejuni are the route of transmission. The route of transmission is food and water contaminated by humans or animals. C. jejuni can also transmit to humans. It is found in their feces, turkeys, wild birds, monkeys, puppies, etc. It is probable among humans that orogenital sexual contact can transmit it. Symptoms include cramping abdominal pain, nausea, vomiting, diarrhea, and occasionally confusion. Sometimes, there will be muscle and joint aches. Half of those with diarrhea due to Campylobacter will have blood in their stool. The symptoms can resemble appendicitis or inflammatory bowel disease. Most infections are mild and usually no treatment is needed in these mild cases. Other cases may require hospitalization with the administration of fluids and antibiotics. Death from fluid volume depletion (dehydration) and shock have occurred.



**CEPHALOSPORIN:** Do not take if you are allergic to any one of the cephalosporins. There is some evidence of partial cross-allergenicity of the cephalosporins and the penicillins. In other words, some people allergic to penicillin will also be allergic to cephalosporins. Notify your doctor if diarrhea develops while taking cephalosporins. Use with caution if there is a history of gastrointestinal disease or colitis. **GENERIC NAME (Brand name or Trade name):** CEFACLOR (Ceclor); CEFADROXIL (Duricef, Ultracef); CEFAZOLIN (Ancef, Kefzol); CEFIXIME (Suprax); CEFOTAXIME (Claforan); CEFOXITIN (Mefoxin); CEFTRIAXONE (Rocephin); CEFUROXIME (Zinacef); CEPHALEXIN (Keflex); CEPHALOTHIN (Keflin, Seffin); CEPHAPIRIN (Cefadyl); CEPHRADINE (Anspor, Velosef).

**TETRACYCLINE (Achromycin, Tetracyn):** Tetracycline should not be taken by persons with impaired kidney or liver functions. It should not be taken during pregnancy and is harmful to infants and young children particularly those less than eight years of age. While taking tetracycline, exaggerated sunburn reactions and skin rashes can develop with exposure to direct sunlight or ultraviolet light. Antacids, dairy products (milk), iron pills, vitamins with minerals, and some foods can interfere with the absorption of tetracycline. The medication should be taken one hour before meals or two hours after meals.

**DOXYCYCLINE (Vibramycin, Vib)**

**MINOCYCLINE (Minocin):** see Te

**CLOTRIMAZOLE (Lotrimin, Gyn)** irritation or sensitivity develops.

**ERYTHROMYCIN (EES, E-Mycin)** is not established. Erythromycin usually erythromycin should be take

**LINDANE (Kwell, Scabene):** Keep Caution in infants, children, pregna

**METRONIDAZOLE (Flagyl, Me)** Amebiasis, Giardiasis, and Gardner beverages while taking this medica associated with tumors in mice and

**MICONAZOLE (Monistat 7):** Stop out of the eyes.

**NYSTATIN (Candex, Mycostatin):**

**PODOPHYLLIN:** Should not be l pregnancy. Can be toxic to nerves podophyllin.

**PROBENECID (Benemid):** Do not under two years of age.

**SPECTINOMYCIN (Trobicin):** O recommended for the treatment of p

**TRIMETHOPRIM-SULFAMETHO**

than two months of age, nursing mothers, or in pregnancy. Adequate fluid intake is needed with this medication.

**INDOMETHACIN (Indocin):** This medication should not be taken by those allergic to aspirin, by those with a history of stomach and/or intestinal problems such as ulcers, by nursing mothers, or by children 14 years of age or younger. Do not take aspirin or alcohol containing beverages with this medication. Indomethacin should be taken immediately after meals, with meals, or with antacids.



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NONOXYNOL-9 (Koromex, Conceptrol, Delfen, Gynol II, Intercept, Ortho-Cream, Emko, Encare, Semicid, Ramses): Not effective if taken orally. Keep out of reach of children. If irritation with use, contact Physician.

Pharmaceutical Company Name: (Trade Names of company's products.)

Burroughs Wellcome Co.: (Zovirax, Septra, Retrovir.)

Wyeth Laboratories.: (Wycillin, Bicillin.)

E.R.Squibb & Sons, Inc.: (Crysticillin, Mycostatin, Velosef.)

Parke-Davis.: (Amcill, ERYC.)

Bristol Laboratories.: (Polycillin, Polymox, Cefadyl, Ultracef.)

Lederle Laboratories.: (Achromycin, Minocin, Suprax.)

Pfizer Laboratories.: (Vibramycin, Vibra Tabs, Tetracycl, Zithromax, Pfizer-E, Pfizerpen, Permapen, Li-Ban Spray, RID Liquid.)

Schering Corporation.: (Lotrimin, Gyne-Lotrimin, Emko.)

Miles Pharmaceuticals.: (Mycelex, Candex, Cipro.)

Abbott Pharmaceuticals, Inc.: (EES.)

Ross Laboratories.: (Peditamycin.)

Upjohn Company.: (Trobicin, E-Mycin.)

Reed & Carnrick.: (Kwell, R & C Spray, R & C Shampoo.)

Stiefel Laboratories, Inc.: (Scabene.)

Ortho Pharmaceutical Corporation.: (Monistat 7, Conceptrol, Delfen, Gynol II, Intercept, Ortho-Cream, Protostat.)

Merck Sharp & Dohme.: (Benemid, Indocin, Mefoxin.)

Norcliff Thayer, Inc.: (A-200 Pyrinate.)

Purdue Frederick Company.: (Betadine, Prioderm.)

Roche Laboratories.: (Bactrim, Larotid, Rocephin.)

Beecham Laboratories.: (Amoxil, Cuprex.)

Youngs Drug Products Corporation.: (Triple X, Koromex, Trojan.)

Astra Pharmaceutical Products, Inc.: (Xylocaine.)

Thompson Medical Company, Inc.: (Encare.)

VLI Corporation.: (Today vaginal sponge)

Whitehall Laboratories, Inc.: (Semicid.)

Schmid Products Company.: (Ramses, Fourex, Sheik, Excita.)

Warner-Lambert Company.: (Lifestyles.)

Searle and Co.: (Flagyl.)

Hoechst-Roussel Pharmaceuticals, Inc.: (Claforan.)

Glaxo, Inc.: (Seffin, Zinacef.)

Eli Lilly and Company.: (Ceclor, Kefzol, Keflin.)

Smith Kline & French Co.: (Ancef, Anspor, SK-Metronidazole.)

Dista Products Company.: (Keflex.)

The Fielding Company.: (Metric-21.)

Lemmon Company.: (Metryl.)

Savage Laboratories.: (Satric.)

McNeil Pharmaceutical.: (Floxin.)

#### CONDOMS (Contraceptives)

Excita, Foures, Lifestyles, Ramses, Sheik, Trojan.

#### CONTRACEPTIVE PREPARATIONS (Spermicides)

Conceptrol contraceptive (cream, gel, foam), Delfen contraceptive foam, Emko Because contraceptive foam, Encare contraceptive suppositories, Gynol II contraceptive jelly, Intercept contraceptive inserts, Koromex contraceptive (cream, crystal clear gel, foam, jelly), Ortho-Cream contraceptive cream, Ramses contraceptive jelly, Semicid contraceptive suppositories, Today vaginal sponge.

## (Appendix B)

### DEFINITIONS and ABBREVIATIONS

**ABORTION** --- A miscarriage. Giving birth or the termination of pregnancy before the stage of viability. A spontaneous abortion occurs from natural causes. An induced abortion occurs due to a specific intervention.

**ABSCESS** --- The collection of pus at a specific site as in an infection resulting in a tooth abscess.

**AIDS** --- Acquired Immunodeficiency Syndrome.

**ANAL** --- see Anus.

**ANOREXIA** --- A lack of appetite or a loss of appetite for food.

**ANUS** --- The opening on the body (rectal area) by which feces is normally excreted.

**APPG** --- Aqueous procaine penicillin G.

**ASYMPTOMATIC** --- Not having any symptoms or awareness of an illness, infection, or disease.

**AUTOINOCULATION** --- The transfer of an infection (organism, bacteria) from one's own body to another part of the body.

**BACTERIA** --- One celled organisms which exists in numerous forms and have many characteristic biochemical properties. The Streptococcus bacterium is an example.

**CERVICITIS** --- Inflammation or infection of the cervix (the lower end of the uterus).

**CERVIX** --- The lower part of the uterus which opens into the vagina.

**CESAREAN SECTION** --- The delivery of the baby by surgery. cutting into the abdomen and removing the baby through this opening instead of allowing the baby to come out through the vagina. Also referred to as a C-Section.

**CHANCER** --- The ulcerated sore of syphilis.

**CMRNG** --- Chromosomally mediated resistant Neisseria gonorrhoeae.

**CMV** --- Cytomegalovirus.

**CONDOM** --- A covering placed over the penis prior to sexual intercourse to prevent infection and pregnancy. A contraceptive.

**CONJUNCTIVITIS** --- An inflammation or infection of the membrane of the eye.

**CONTACTS** --- Those persons who have been near enough to an infection to have the possibility of developing that infection.

**CONTAGIOUS** --- An infection or illness that is capable of being transmitted to others.

**CONTRACEPTIVES** --- Agents that decrease the chance of pregnancy. Condom, IUD, foams, gels, diaphragm, etc.

**CSF** --- Cerebrospinal fluid. This is the fluid located in and around the brain and spinal cord.

**CULDOCENTESIS** --- Fluid is removed from the pelvis by means of a needle inserted through the posterior vaginal wall.

**CYSTITIS** --- An infection or inflammation of the bladder.

**DIAPHRAGM** --- A device that is placed in the vagina and over the cervix to prevent pregnancy. A contraceptive.

DISCHARGE --- A material that is excreted such as pus from a sore or drainage from the penis with gonorrhea infections.

DYSFUNCTION --- Impaired function. To function abnormally.

DYSURIA --- A painful or burning sensation on urinating.

ECTOPIC PREGNANCY --- See Tubal Pregnancy

ENCEPHALITIS --- An infection and/or inflammation of the brain.

EPIDIDYMITIS --- An infection of the tubes in the scrotum that transport sperm. A swelling and tenderness of the scrotum.

FALLOPIAN TUBES --- Ducts in the female that connects the ovaries to the uterus. It is through this duct that the female egg passes to reach the uterus where it is fertilized.

FECES --- Bowel movements. Stool. the body waste that is excreted from the intestine through the anus.

FISTULAS --- An abnormal passage in the body. For example, a small opening from the intestine to the abdominal wall is a fistula which would allow feces to pass to the outside of the body at that site.

FUNGUS --- The classification of organisms that are plant-like, reproduce by means of spores, have a rigid cell wall, and do not have chlorophyll. Examples are yeast, molds, ringworms, and mushrooms.

GENITALS --- Generally referring to the reproductive organs. (a) In the female: vagina, uterus, ovaries, etc. (b) In the male: the penis, prostate, testicles, etc. (c) In this manual genital is used to also include the anus in the male and female.

GROIN --- The region between the abdomen and the thighs.

HCL --- Hydrochloride.

HETEROSEXUAL --- Attraction toward the opposite sex. Sexual relationship between a man and woman.

HOMOSEXUAL --- Attraction toward the same sex. Sexual relationship between a man and a man or between a woman and a woman.

HSV --- Herpes simplex virus.

HTLV-III/LAV --- Human T-cell lymphotropic virus type III/Lymphadenopathy-associated virus.

IM --- Intramuscularly. Into the muscles.

INCONTINENCE --- Loss of control of the excretion of the feces or the urine.

INCUBATION --- The time from acquisition of an infection until symptoms develop. For example, the incubation period of gonorrhea is 2 to 7 days. This means that when a person develops gonorrhea, the actual contraction of the disease occurred 2 to 7 days prior to the onset of symptoms.

INGUINAL --- Relating to the groin region.

IUD --- IntraUterine Device. A device that is placed in the uterus to prevent pregnancy. A contraceptive.

IV --- Intravenously. Into the vein.

LAPAROSCOPY --- A surgical procedure used to look inside and examine the abdominal cavity with a tube-like instrument. The instrument is inserted into the abdomen through a small incision.

LGV --- Lymphogranuloma venereum.

LYMPH NODES --- Also called lymph glands. This is a nodule of specialized tissue to which infection sites drain. Lymph nodes are involved in immunity and the removal of toxic agents such as bacteria and pus from the involved area.

MALAISE --- A vague feeling of illness.

MUCOUS MEMBRANE --- The membrane or covering of certain body areas: The eyes, the nasal passages, inside the mouth, the anus, the penis, the vagina, and the uterus.

NGU --- Nongonococcal urethritis.

NURSING MOTHERS --- Mothers who are breast-feeding their infants. May also be referred to as "lactating" women.

OPPORTUNISTIC DISEASE --- An illness, infection, or disease that usually is not a threat to otherwise healthy people.

OROGENITAL --- Involving contact between the mouth and genitals.

PELVIC INFLAMMATORY DISEASE (PID; Salpingitis) --- An infection of the pelvic area that produces painful inflammation of the pelvic organs and the surrounding structures.

PELVIS (PELVIC) --- Although not exactly correct, the pelvis can be thought of as the lower portion of the abdomen or as the area between both hips.

PENIS --- The male organ for urination and sexual intercourse.

PHARYNGITIS --- An infection or inflammation of the throat (pharynx).

PID --- see Pelvic Inflammatory Disease.

PPNG --- Penicillinase-producing *Neisseria gonorrhoeae*.

PUBIC --- The area in the region of the lower part of the abdomen. The area of the external genitals.

RECTUM (RECTAL) --- the last section of the large intestine located just before the anal opening.

RPR --- Rapid Plasma Reagin. A blood test for detecting syphilis.

SALPINGITIS --- Infection of the fallopian tubes. See Pelvic Inflammatory Disease.

SCROTUM --- The sack of skin in which the male testicles (balls) are located.

SEMEN --- See Sperm.

SPERM --- The male fluid secreted from the penis during sexual intercourse. This fluid results in pregnancy when it comes into contact with the female egg (fertilization) in the uterus. Technically, the male fluid is actually Semen in which there are millions of sperms.

SPERMICIDES (SPERMATOCIDES) --- Chemicals that kill sperm such as contraceptive foams, jellies, creams, tablets, and suppositories.

STD --- Sexually Transmitted Disease.

STOOL --- See Feces.

STRICTURES --- A narrowing of a passage such as a decrease in the size of the anal opening (anal stricture).

STS --- Serologic Test for Syphilis. Blood tests for syphilis.

TUBAL PREGNANCY --- Ectopic pregnancy. A pregnancy that develops in the fallopian tubes instead of normally developing in the uterus.

URETHRA --- The passage by which urine passes from the bladder to the outside of the body.

URETHRITIS --- Inflammation or infection of the urinary passage (urethra).

UTERUS --- The female organ in which the baby grows during pregnancy. The uterus is located in the lower abdomen at the back of the vagina.

VAGINA (VAGINAL) --- The female passage located just below the urethra. It is the female passage into which the penis is inserted during sexual intercourse. It is the passage through which the baby is delivered at birth.

VD --- Venereal Disease. A disease transmitted by sexual intercourse.

VDRL --- Venereal Disease Research Laboratory. A blood test for detecting syphilis.

VENEREAL --- Referring to something due to sexual intercourse.

VIRUS --- An organism that is not visible by the ordinary light microscope and is dependent on nutrients inside the cells that they invade. An example is the herpes virus.

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# **END OF SEXUALLY TRANSMITTED DISEASES MANUAL**

## **THE SEXUALLY TRANSMITTED DISEASES MANUAL**

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