

SEXUALLY TRANSMITTED INFECTIONS

THAT IS HOW TO TAKE CARE OF HEALTH

Bartosz Szetela

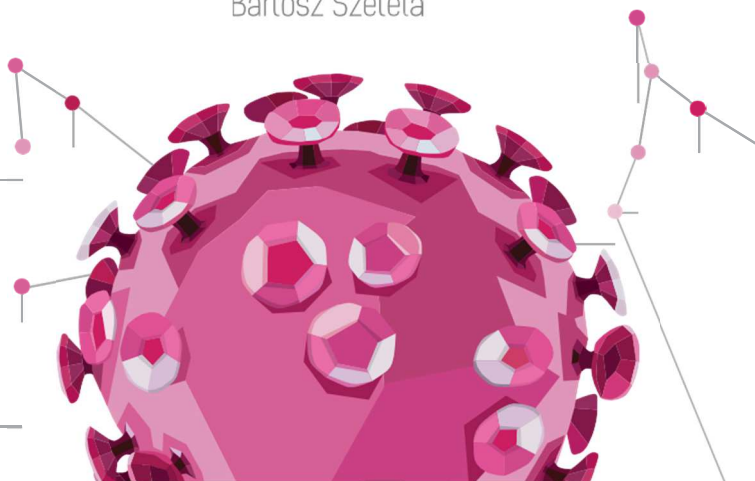








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SEXUALLY TRANSMITTED INFECTIONS



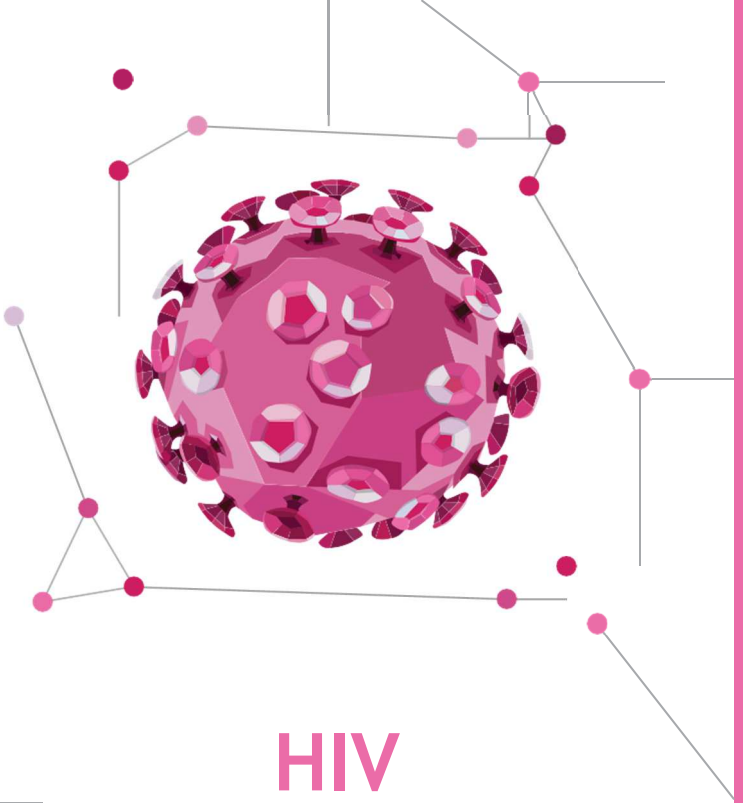
ARE A SERIOUS HEALTH PROBLEM

BOTH IN POLAND AND THROUGHOUT THE WORLD

Furthermore, this problem has been rapidly spreading for the last few years. Certain sexually transmitted infections, such as syphilis, has recently reappeared among the people having sexual contacts with the infected patients using no condoms, whereas the other ones, such as chlamydiosis, are only at the outset of professional diagnosis and control in Poland and of becoming a common knowledge.

In addition, many sexually transmitted diseases are relatively frequently associated with HIV infection, increasing the risk of its occurrence several times (even up to 10 times).

The most common sexually transmitted diseases along with the description of the most frequent transmission routes, prophylaxis and symptoms as well as diagnostic and treatment methods are provided below.



HIV

What is it?

The human immunodeficiency virus damages the immune system cells and causes AIDS after 6 – 12 years without treatment in average. When detected early, it can be managed with drugs and prevented from progressing.

How is it transmitted?

In everyday conditions, the virus is transmitted by: blood, sperm, pre-ejaculate (fluid which seeps from urethra when a male is sexually aroused), as well as vaginal and rectal secretions. The infection requires contact with fresh wound or mucous membranes (eyes, mouth, nose, vagina, rectum or urethra). Healthy and non-injured skin prevents the infection. The following help to protect against the infection in sexual contacts: condom, latex tissues and gloves. In certain cases, you should also consider using the post-exposure prophylaxis. For more detailed information, contact a HIV health care provider. List of HIV/AIDS treatment centres is available at www.aids.gov.pl.

Everyday contacts, common apartment, working with or using the same kitchen appliances or the same bathroom pose no risk. HIV is extremely sensitive to detergents (soap, washing powder, dish soap) and become non-infectious after contact with them. The same applies to higher temperatures (above 56° C) for above 30 minutes and drying.

The main infection routes are sexual contacts and intravenous drug use. In the case of no applicable pre-delivery and delivery procedures, HIV infection can be also transmitted from the infected mother to an infant. Breastfeeding is prohibited.

Use of common drinking tubes (drinking straws, banknotes) to breathe in drugs if their edges are covered with blood are a risk factor (this poses also a high risk of HBV and HCV infection – so called "infectious jaundices").


What are the symptoms?

In the initial phase of infection (first 2-8 weeks) non-specific flu-like symptoms can occur. These can be also absent. The infection can proceed for many years without any symptoms however the patients can infect the others during the contacts described above.

How to test and treat yourself?

The only method to confirm or exclude the infection is to perform the test for HIV antigen or p24 protein. If the result is positive, you should verify it with an additional confirmatory test performed from the second blood sampling.

The infection can be excluded only after 3 months from a risk situation. You can usually confirm it earlier i.e. after 5 – 6 weeks. The initial suspicion of infection can be diagnosed after 2 weeks from a risk situation.

If you suspect that you could be infected with HIV,

make a test.

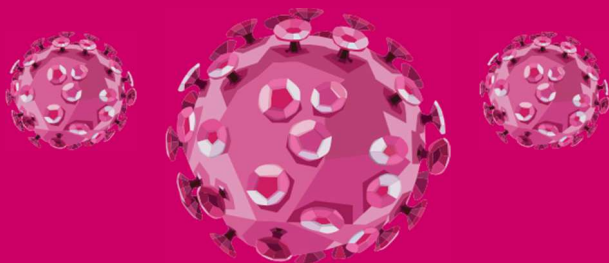
You can make a test by visiting a health care provider, reserving your personal data, as well as free of charge and anonymously in the consultation and diagnostic centres (www.aids.gov.pl – HIV Tests tab).

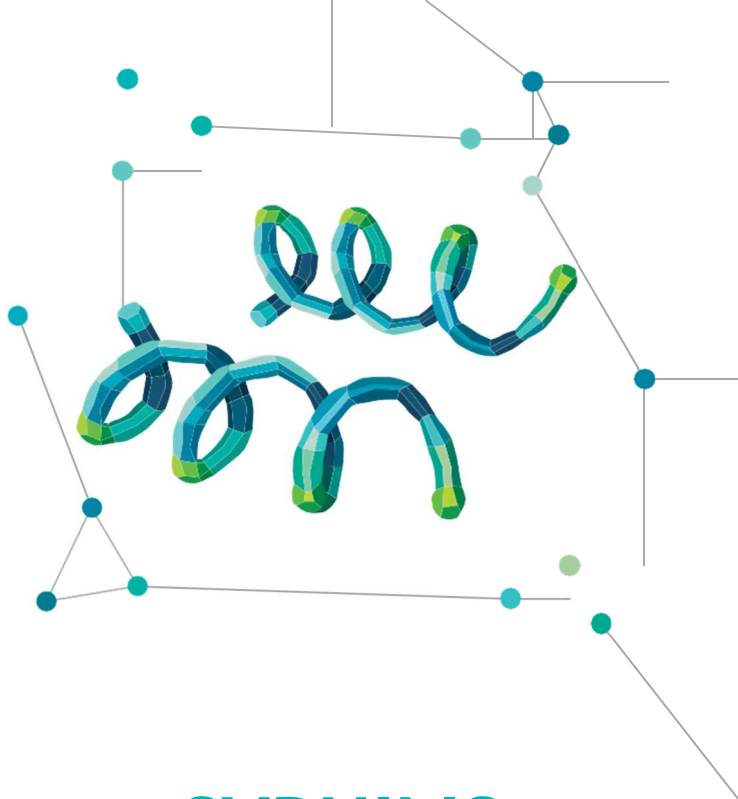
Treatment of people with HIV (Polish citizens) is financed by the Ministry of Health in 100% and available to each patient eligible for treatment due to medical indications.

Treatment enables preventing the virus from multiplying as well as significantly extends and improves the quality of life. The earlier detection, the easier the therapy (less complications).

REMEMBER!

Even in the case of effective treatment
continue to use condoms
during sexual contacts
since there is still a risk of infecting your
partner





SYPHILIS

What is it?

An infection caused by *Spirochaeta pallida* (bacteria), sometimes called pox. There are also plenty of picturesque historical names.

How is it transmitted?

Syphilis is easily transmittable during close contacts with the infected person, including oral sex, when the lesions (ulceration or nodules) are located in the oral cavity and pharyngeal area. Even using common kitchen or beauty appliances or kissing can pose a risk (depending on the condition of the infected person). Contact must be direct and close, since *Spirochaeta pallida* is highly sensitive to biophysical (low/increased temperature, sun, drying) and chemical factors. Bacteria die almost instantaneously when outside the body. Anecdotal stories on infecting with syphilis after using public toilettes or common towels should be considered unlikely.

Condom, latex tissue and gloves will protect you against infection. If latex tissues for oral sex with female partner are not available, do them yourself by cutting the condom lengthwise.

What are the symptoms?

Syphilis is called a great imitator and can mimic plenty of other diseases. Its course can be divided into three phases:

- primary early syphilis: ulceration – hard and painless – occurs after several weeks from the infection at the infection site (usually penis, mouth, tongue, throat, finger, vulva, vagina or rectum) – and can remain unnoticed. It is highly infectious however disappears spontaneously after several weeks.
- secondary early syphilis: from the primary infection site, bacteria

spread throughout the body, which leads to formation of follicular reddish eczema on the torso and – which is highly specific – also on palms and soles. Skin lesions are not itchy however the secretion formed after raking them over is highly infectious. After several weeks the eczema disappears spontaneously.

- **late syphilis:** after more than 2 years from the infection, usually completely asymptomatic, the syphilomas (nodules) can manifest. These can form at any site, are painless, usually slightly darker from the adjoining skin tissue. The syphilomas are frequently necrotic and break down with concomitant formation of ulceration and destruction of adjoining tissues (destruction and deformation of e.g. nose, genitals or internal organs).

In people with HIV, syphilitic lesions can be multiple and dispersed and can persist longer or occur earlier.

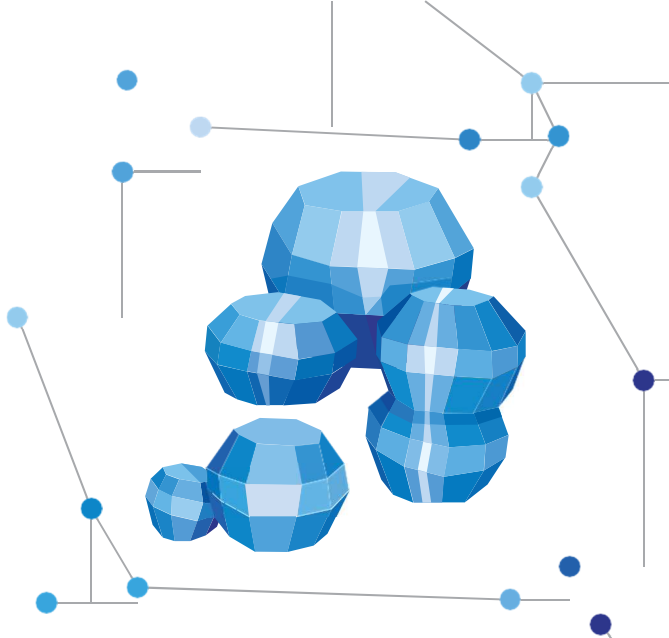
How to test and treat yourself?

The only reliable test is blood test for presence of *Spirochaeta pallida* antigens (VDRL, RPR), which in the case of positive result should be verified by so called confirmatory test.

Treatment is usually quite simple and consists in taking an antibiotic. Depending on the infection phase, a single dose is administered or the treatment is continued for 10 – 21 days.

Treatment is usually fully successful. However, when commenced after 5 – 10 years from the infection, permanent damages caused by bacteria can remain. Literature describes an increasing number of cases of ineffective treatment related to antibiotic resistance of bacteria.

Recovery does not protect against another infection.



GONORRHEA

What is it?

An infection caused by *Neisseria gonorrhoeae* (bacteria), sometimes called the clap. It usually attacks urethra, cervix or rectum however the lesions can manifest also on conjunctivas (eyes) or throat. In sporadic cases, the infections spreads into joints and cardiac muscle – in such case hospitalisation is necessary.

How is it transmitted?

In practice, it is transmitted only during very close direct contacts (touching, petting and kissing) and during sex. The bacteria die almost immediately when outside the body however in specific conditions e.g. in sauna it can transmit via common seats.

The following protect against infection during sexual contacts: condom, latex tissues and gloves.

What are the symptoms?

Symptoms and ailments depend on the site:

- urethritis: purulent exudate, heavy burning sensation when urinating, urethra mouth redness;
- cervicitis: pain in lower abdomen; vaginal discharge;
- proctitis: pain when excreting or when resting, burning sensation, purulent exudate from rectum, rectal redness;
- conjunctivitis: conjunctiva redness and oedema, purulent exudate from eye, pain and hyper-sensitivity to light;
- pharyngitis: pain, purulent lesions, oedema
- testitis/orchitis: oedema, pain and redness of testicles.

Gonorrhea can cause infertility in men

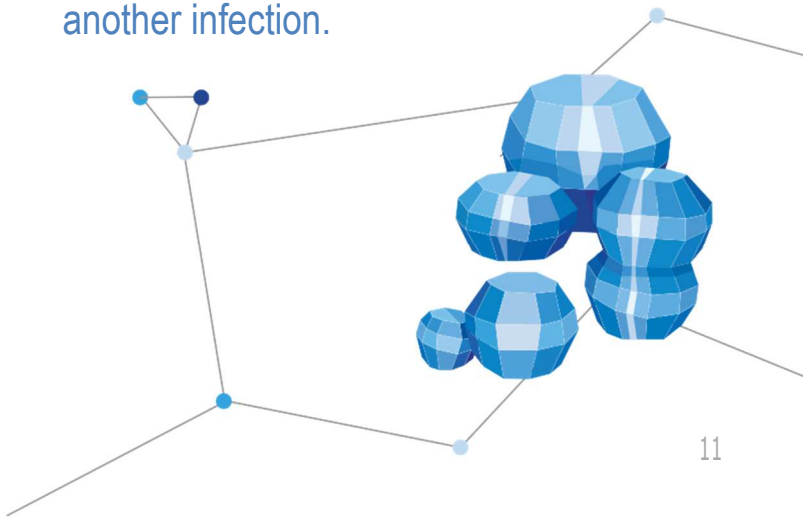
and sometimes in women.

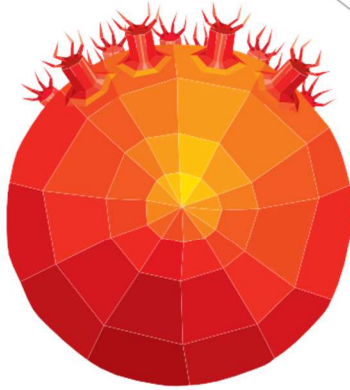
How to test and treat yourself?

Diagnosis is based on urethral, rectal, pharyngeal or conjunctival swab and microscopic examination of the specimen, followed by bacterial culture. In the case of any difficulties with culture processing, molecular testing can be performed to detect bacterial genetic material.

Treatment is easy and requires administration of an antibiotic for a different time period (from 1 day to 3 weeks). Discuss details with a health care provider. Literature describes an increasing number of cases of ineffective treatment related to antibiotic resistance of bacteria. Therefore it is recommended to process bacterial cultures as frequently as possible and determine antibiotic resistance of bacteria.

Recovery does not protect against another infection.





CHLAMYDIOSIS

What is it?

A relatively frequent inflammation caused by *Chlamydia trachomatis*, most commonly infecting urethra, cervix, rectum, conjunctivas and throat.

How is it transmitted?

The sexually transmitted infection (during each type of sexual contact), transmittable even in the case of no contact with sperm or vaginal mucus. The infectious agent is discharge (usually mucosal) from the inflamed sites (urethra, cervix, eye, rectum and throat). Everyday non-intimate contacts are not a risk factor.

The following protect against infection during sexual contacts: condom, latex tissues and gloves.

What are the symptoms?

The symptoms are usually associated with urinary tracts (urethritis or vaginitis/cervicitis) and include mucosal exudate from urethra, burning sensation when urinating, vaginal discharge and itching. The infection may also spread on rectum, throat or conjunctivas and progress with redness, exudate and pain.

The symptoms manifest usually after 1 – 3 weeks from the infection and are similar to the ones of gonorrhea however the course is more frequently asymptomatic. If the ailments occur, these are less severe than in the case of gonorrhea.

Both chlamydiosis and gonorrhea can proceed with testitis/orchitis and with adnexitis in women, which after several years of asymptomatic infection can lead to fallopian tube fibrosis being among the causes of infertility in women.

How to test and treat yourself?

At present, the first-choice method is molecular (genetic) testing of swab from the suspected sites – the most sensitive diagnostic method. Conjunctival, pharyngeal, rectal, vaginal or urethral swab can be also examined under the microscope however this method is less sensitive and available only in specialist microbiological laboratories (immunofluorescence technique). Do not urinate in 2 hours before testing. In some cases you can use your urine for diagnosis however this method is also less sensitive.

Treatment is effective and simple. Antibiotic is administered for different periods of time (from 1 day to 2 weeks depending on antibiotic) – discuss details with a health care provider. No issue of antibiotic resistance of bacteria is identified.

Recovery does not protect against
another infection.





HPV

What is it?

A common and highly infectious human papilloma virus. There are almost 200 different types of HPV and infection with some of them can significantly increase the risk of vulvar, cervical, penis, rectal and pharyngeal cancers. Lesions caused by HPV are called papillae and when manifested on mucous membranes – condylomas. Common name for skin lesions caused by HPV is a wart.

How is it transmitted?

The infection is the most commonly transmitted during sexual contacts (each type), close intimate contacts or when using a swimming-pool or sauna in effect of longer contact, occurrence of microtraumas and humid environment. Close everyday contact can also result in the infection.

What are the symptoms?

The infection can proceed asymptotically however in most cases there are papillae (cauliflower-like, follicular or process-like) occurring at the site of virus multiplication. These are infectious and can spread into other body parts or transmit to other persons.

Tearing (accidental or during sexual intercourse) causes substantial bleeding that can increase the risk of HIV infection.

A condom will protect you against the infection however due to widespread presence of virus on skin HPV can transmit via any body parts not covered with condom.

How to test and treat yourself?

If papillae are visible, usually an inspection of skin or areas of genitals and rectum is sufficient. In some cases, gynaecological examination (including colposcopy) or per rectum examination is necessary. In order to confirm asymptomatic infection, it is necessary to take a swab from the suspected

site and perform molecular (genetic) testing using the PCR (polymerase chain reaction) method.

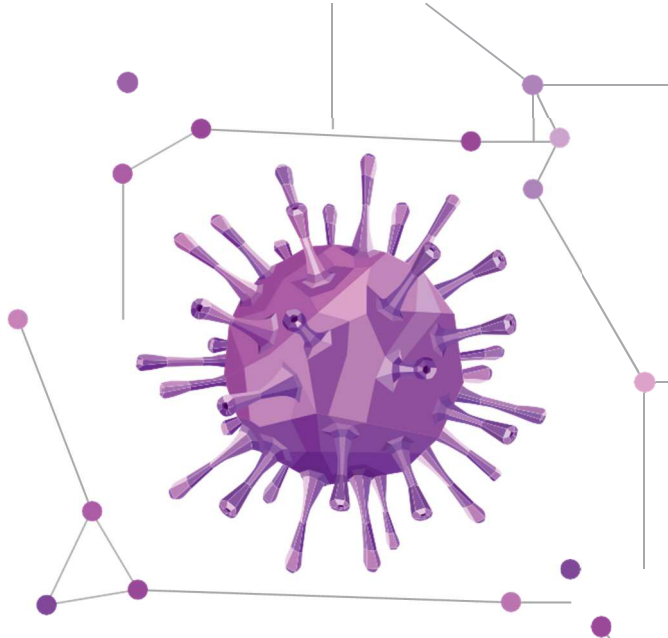
Visible papillae should be treated by liquid nitrogen cryotherapy, laser removal or using specialist chemical agents. Recurrences are relatively frequent – the treatment should be then repeated. Overgrown, extensive and deep lesions can require surgery.

According to the estimations, only in approx. 50% of people a complete recovery and elimination of the virus from the body are observed. Therefore, after treating the papillae/condylomas and in the case of asymptomatic infections, regular gynaecological or proctological examinations are necessary for early detection and treatment of any possible cancerous lesions. In people with immune disorders, percentage of complete recoveries can drop down to below 30%.

Currently available vaccines protect against the most common and dangerous HPV types (6, 11, 16, 18, 31, 33, 45, 52 and 58 – depending on type of vaccine) which protects against more than 75-90% cases of condylomas and cancerous lesions.

**Vaccinate before your
sexual initiation.**





HSV

What is it?

Herpes simplex virus. There are two types of this virus: HSV-1 – more commonly manifested by facial lesions (so called cold sore) and torso and HSV-2 – more commonly causing genital lesions.

How it is transmitted?

The infection is transmitted during close contacts with the persons with active skin and mucosal lesions (blisters, ulceration) and to a lesser extent during the contacts with asymptotically infected persons. After primary infection, the virus becomes latent in nerve ganglia and reactivates when induced by immune drop to manifest in a form of lesions at a site covered by the infected nerve ganglia.

HSV-1 infection is most common in adolescents, whereas infection with HSV-2 – is most frequent during sexual contacts.

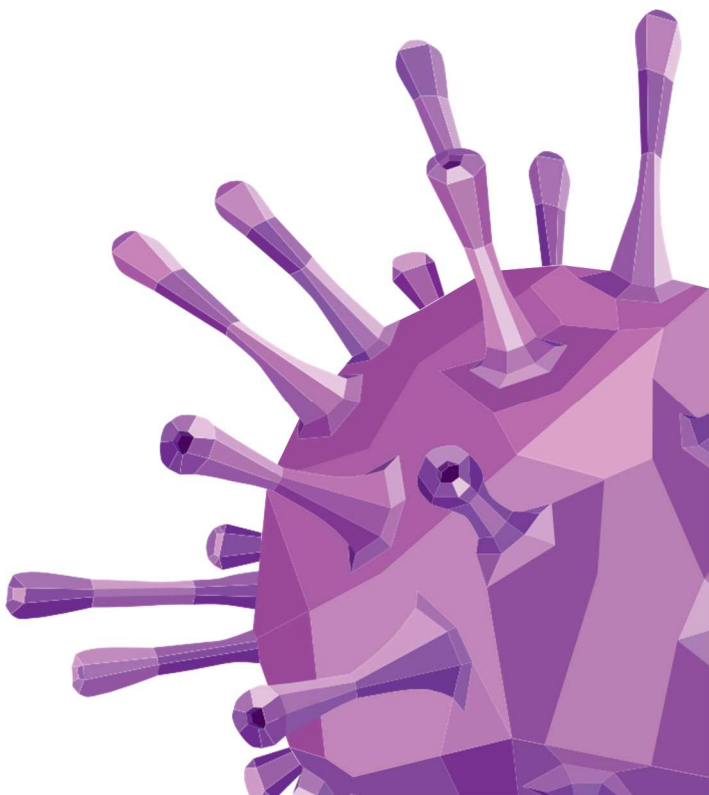
What are the symptoms?

Both in the case of primary infection and reactivation, the first symptom is itching at the virus multiplication site, followed by redness and papulae transforming into blisters covered with thin epidermal layer. The blisters burst easily and transform into shallow but painful ulcerations (on skin and mucous membranes). Presence of ulcerations increases the risk of HIV infection 5 – 10 times.

How to test and treat yourself?

In most cases, diagnosis is made on the basis of inspection of the lesions. In doubtful cases, an ulceration specimen is examined under the microscope.

Treatment is based on acyclovir administered usually for 5 - 7 days, sometimes longer. For extensive, recurring or infected lesions (including bacterial infections), prolongation of therapy and adding an antibiotic can be necessary. In extreme cases (frequently recurring lesions) acyclovir can be used for many months or years.



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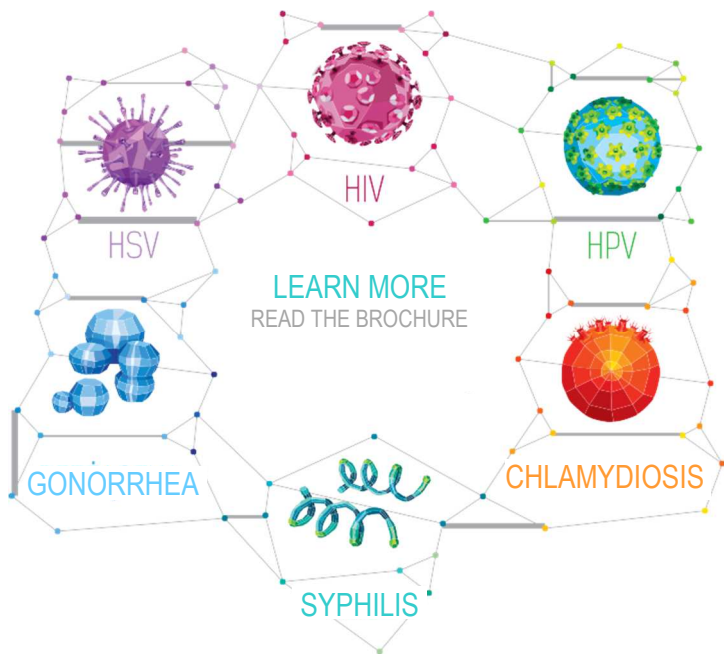
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