

Syphilis: Aid to Diagnosis

This document contains extremely graphic images.

These images are intended to help health care professionals identify and diagnose syphilis.

All images and descriptions courtesy of the CDC Public Health Image Library- <http://phil.cdc.gov/phil/>

Primary:

Usually, a single ulcer (chancre) appears at the site where the bacteria entered the body. The genitals are the most common location for chancres to develop, but these ulcers also can form around the mouth or anus. The chancre is firm and painless, and it oozes fluid that contains syphilis bacteria. Sometimes, lymph nodes near the ulcer become enlarged, but remain painless. The chancre of primary syphilis usually heals after one to five weeks, although the person remains infected.

- Painless lesion appears 10-90 days at site of exposure, persists for 1-5 weeks
- Multiple lesions (25% of patients)
- Often goes unnoticed if it's not someplace obvious, i.e. inter-vaginally, rectally, orally

Primary syphilitic chancres

Primary syphilitic chancres are usually firm, round, small, and painless, and develop at the spot where the *T. pallidum* bacteria enter the body. The chancre lasts 1 to 5 weeks, and it heals without treatment. However, if adequate treatment is not administered, the infection progresses to the secondary stage.



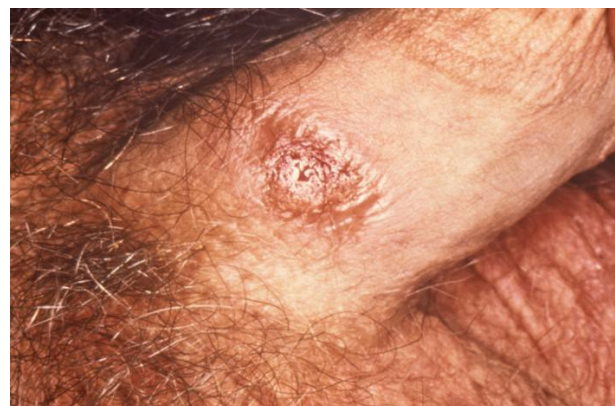
This patient presented with a penile chancre located on the proximal penile shaft, which was diagnosed as a primary syphilitic infection.

Photo Credit: CDC/ Dr. Gavin Hart; Dr. N. J. Fiumara



This image shows chancres on the penile shaft due to a primary syphilitic infection.

Photo Credit: CDC/M. Rein, VD



This patient presented with a penile chancre located on the proximal penile shaft, which was diagnosed as a primary syphilitic infection.

Photo Credit: CDC/ Dr. N. J. Fiumara; Dr. Gavin Hart

SYPHILIS: AID TO DIAGNOSIS



This patient presented with a primary vulvar syphilitic chancre. *Photo Credit: CDC*



A patient with a primary syphilitic vulvar chancre, and condyloma acuminatum, or genital warts.

Photo Credit: CDC/Susan Lindsley



This patient presented with a primary anorectal syphilitic chancre during the primary stage of the disease. *Photo Credit: CDC/Susan Lindsley, VD*



This patient presented with an anal chancre due to *Treponema pallidum* bacteria. *Photo Credit: CDC*



This patient presented with a primary syphilitic chancre of the lip. *Photo Credit: CDC*



This patient presented with an extragenital facial chancre of the lip. *Photo Credit: CDC*

Secondary:

Secondary syphilis is the most contagious of all the stages of this disease, and is characterized by a systemic spread of the *Treponema pallidum* bacterial spirochetes. Skin rash and malaise commonly characterize the secondary stage. The signs and symptoms of secondary syphilis will resolve with or without treatment, but without treatment, the infection will progress to the latent and late stages of disease.

- “Rash” (75%-90% of patients)
- Malaise, fever (50-80%)
- Mucous patches on oral cavity and genital areas (5-30%)
- Moist, heaped, wart-like lesions—Condyloma lata—on genital, anal or oral areas (5-25)
- Hair loss (10-15%)
- Neurosyphilis (<2%)

Characteristic rash

The characteristic rash of secondary syphilis may appear as rough, red, or reddish brown spots both on the palms of the hands and the bottoms of the feet. However, rashes with a different appearance may occur on other parts of the body, sometimes resembling rashes caused by other diseases. Sometimes rashes associated with secondary syphilis are so faint that they are not noticed.



Close-up view of keratotic lesions on the palms of this patient's hands due to a secondary syphilitic infection.

Photo Credit: CDC



This patient presented with secondary syphilitic lesions on the palms of her hands.

Photo Credit: CDC



This patient presented with secondary syphilitic lesions on the palms.

Photo Credit: CDC/ Susan Lindsley

SYPHILIS: AID TO DIAGNOSIS



This patient presented with secondary syphilitic lesions on the plantar aspect of the foot.

Photo Credit: CDC/Susan Lindsley



This patient presented with secondary papular syphilids on the soles of his feet.

Photo Credit: CDC/Susan Lindsley



This syphilis patient presented with a "roseola rash", similar to that of viral eczema, which developed on her buttocks and legs during the secondary stage of the disease.

Photo Credit: CDC/J. Pledger, BSS/VD



A photograph of a secondary syphilitic papulosquamous rash seen on the torso and upper body.

Photo Credit: CDC/Susan Lindsley



This patient presented with a secondary syphilitic rash covering his back.

Photo Credit: CDC / Dr. Gavin Hart



The pustules shown under this patient's chin are due to a secondary syphilitic infection. *Photo Credit: CDC*

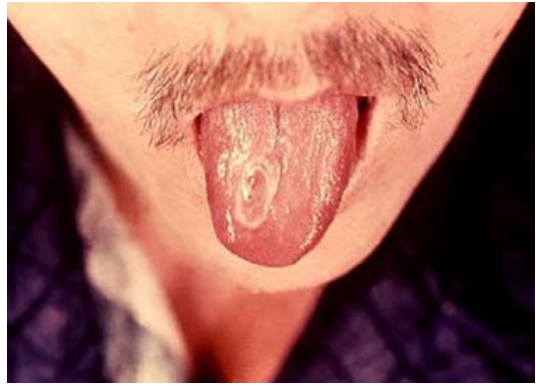
Mucous patches

Mucous patches form during the breakdown of mucous membranes, seen here on the inferior surface of the tongue.

During the secondary stage of syphilis, mucous patches can also develop inside the mouth, vulva, and vagina.



A photograph of mucous patches on the tongue due to secondary syphilis. *Photo Credit: CDC/Susan Lindsley*



This image depicts a lingual mucous patch on the tongue of a patient who was subsequently diagnosed with secondary syphilis. *Photo Credit: CDC/Susan Lindsley*

Condylomata lata

Condylomata lata lesions usually present as gray, raised papules that sometimes appear on the vulva or near the anus, or in any other warm intertriginous region.

Because this type of cutaneous lesion is also a symptom manifested by illnesses other than syphilis such as condylomata acuminata, a differential diagnosis must be performed in order to rule out other possibilities. Syphilis is known as the “great imitator” for, as in this case, manifestations often resemble other disease processes.



This patient presented with a case of secondary syphilis manifested as perineal wart-like growths. *Photo Credit: CDC*
1 / 2016



This patient presented with several infrascrotal condylomatous lesions, which is one of the manifestations of secondary syphilis. *Photo Credit: CDC/Susan Lindsley*



This patient presented with secondary syphilitic lesions of vagina. *Photo Credit: CDC /J. Pledger*

Alopecia



This patient presented with a case of alopecia during the secondary stage of syphilis.
Photo Credit: CDC/Susan Lindsley



This patient presented with a case of alopecia during the secondary stage of syphilis.
Photo Credit: CDC

Late stages:

Without treatment, an infected person still has syphilis even though there are no signs or symptoms. It remains in the body, and it may begin to damage the internal organs, including the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints.

Syphilitic gummas

Tertiary syphilitic gummas may mimic basal cell carcinoma. The gummatous tumors are benign and, if properly treated, in most cases will heal and the patient will recover.



A photograph of a patient with tertiary syphilis resulting in gummas seen here on the nose.

Photo Credit: CDC/Susan Lindsley



This patient presented with a gumma of nose due to a long standing tertiary syphilitic *Treponema pallidum* infection.

Photo Credit: CDC/J. Pledger



This patient presented with a swollen scrotum, which was diagnosed as a syphilitic gumma of the testicle.

Photo Credit: CDC/Susan Lindsley, VD

Interstitial keratitis

Interstitial keratitis, which is an inflammation of the cornea's connective tissue elements, and usually affects both eyes, can occur as a complication brought on by congenital, or acquired syphilis. IK usually occurs in children older than two years of age.



This photograph depicts the presence of a diffuse stromal haze in the cornea of a female patient, known as interstitial keratitis (IK), which was due to her late-staged congenital syphilitic condition. *Photo Credit: CDC/Susan Lindsley, VD*