

## **INTRODUCTION:**

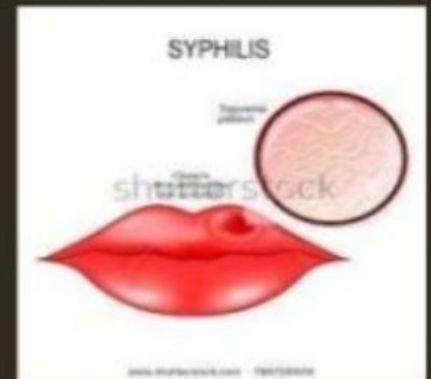
- ❖ Syphilis is contagious bacterial infection that is transmitted through contact with a chancre on an infected person, usually during intimate sexual contact.
- ❖ It is usually caused by a type of bacterium called *Treponema pallidum*.

## **CAUSES OF SYPHILIS**

- Bacterial species of *Treponema pallidum*

## **MODE OF TRANSMISSION**

- ✓ Syphilis is transmitted primarily by sexual contact or during pregnancy from a mother to her fetus
- ✓ It is thus transmissible by kissing near a lesion
- ✓ It can be transmitted by blood products, but the risk is low due to blood testing in many countries.



Progresses through 4 stages: primary, secondary, latent and tertiary stages.

Stages get progressively worse if left untreated highly contagious potentially fatal not all people show visible signs disease at the beginning.

### **PRIMARY STAGE:**

- A small painless ulcer like sore called a chancre appears at the site of initial infection.
- Chancre usually appears 2-3 weeks after the initial infection a rash near the chancre may also appear.
- The chancre may go unnoticed because of the mouth, anus, vagina, or throat.
- Usually disappears in 4-6 weeks without treatment the bacteria is still multiplying in the body contagiously



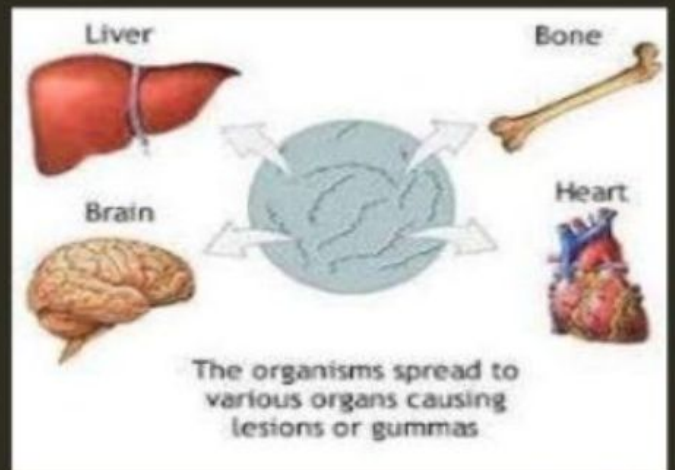
## SECONDARY STAGE:

- Begins a few weeks to months after chancre heals.
- Rash with flat and raised patches frequently on palms, soles, can be anywhere on body.
- Lesions in the mouth, vagina, penis, mucus patches.
- Fever
- Swollen glands
- Loss of appetite
- Fatigue
- Aches and pains in bones or joints
- Patchy hair loss
- Chancre still present in some cases , bacteria has spread to the blood most contagious stage resolves in 2-6 weeks without treatment.



## LATENT STAGE:

- Characterized by the lack of symptoms no symptoms may appear for months or years.
- Syphilis is still alive in the body bacteria starts to damage the internal organs; like brain, heart, sexual organs and damage can go unnoticed until the next stage.



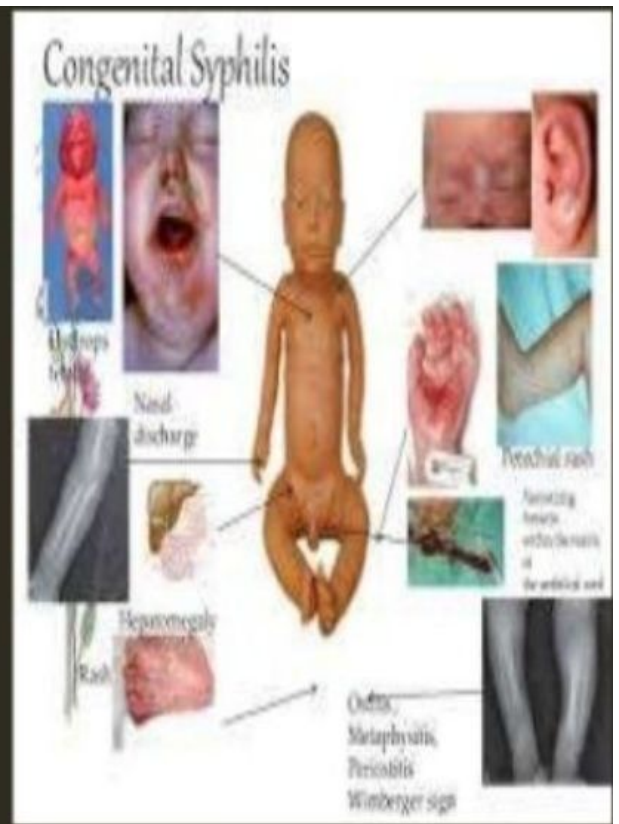
### TERTIARY STAGE:

- Occurs many years later, 5 to 50 years after secondary stage symptoms disappear.
- Characterized by paralysis, gradual blindness, deterioration of the brain, loss of co-ordination, shooting pains and health.
- Gummatous syphilis-destructive lesions of bones, skin or live
- Cardiovascular syphilis-severs\_ damage to heart and blood vessels, inflammation of the aorta, heart disease.
- Neuro syphilis-nervous system disorders; brain, eye, spinal cord, auditory system.
- Brain- can cause paralysis, blindness, dementia or insanity.



## CONGENITAL SYPHILIS:

- During the secondary stage the infection can be transferred to the baby.
- If the mother is not treated during pregnancy it cause deformations, or possibly death.
- Tested after birth; if the baby has syphilis it is treated right away.



## SYPHILIS

- **Pathophysiology:**

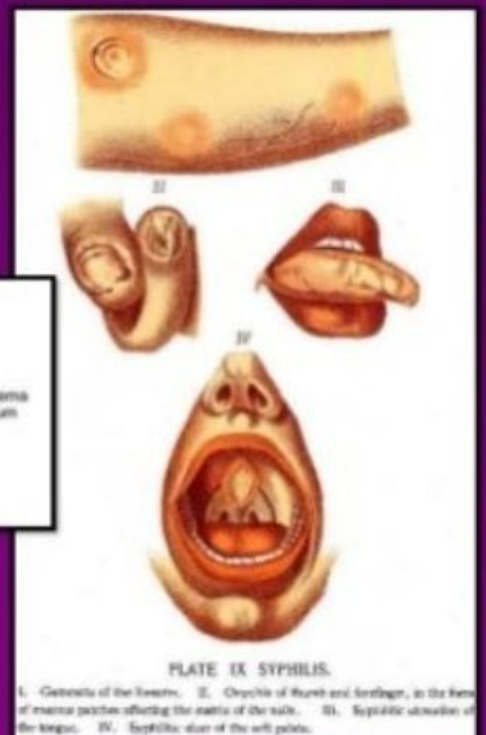
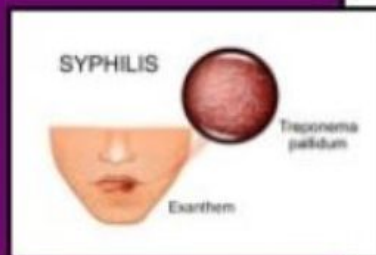
- Organism penetrates intact membrane or break in epithelium, resulting in spirochetemia.
- Enters Lymphatic system to regional lymph nodes and spread in blood throughout the body.
- It can attach to the endothelial lining of Blood Inflammation Endocarditis.
- Invasion of the CNS may happen at any stage of Syphilis.



# SYPHLLIS

## • Complications of Untreated Syphilis

- Gummatous lesions
- Syphilis ↑↑ the risk of HIV transmission
- Cardiovascular syphilis
- Neurosyphilis
- Syphilis is fatal if untreated with ↑↑ mortality rate in Males than females.

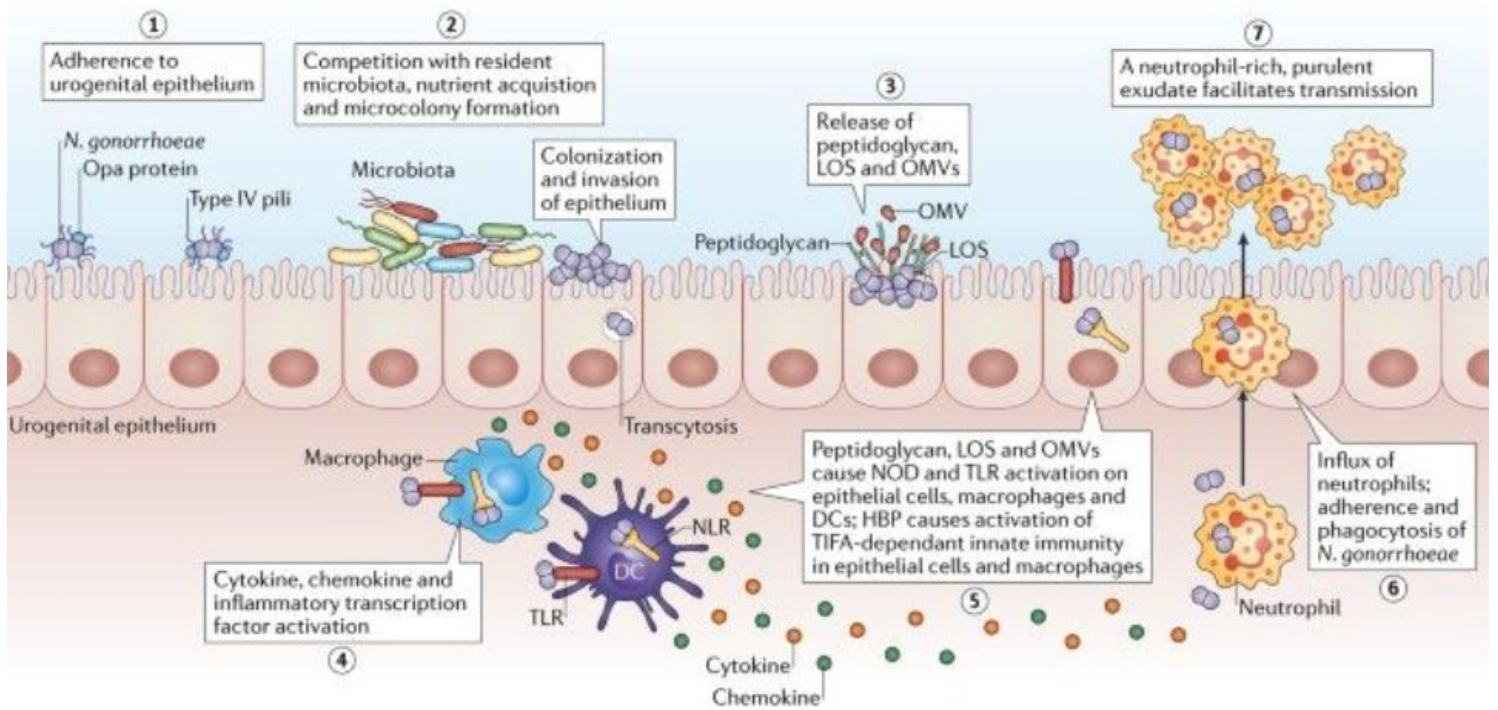




## GONORRHEA

- **Pathogen Cause:** *Neisseria gonorrhoea*
  - Gram negative diplococcus
  - Humans are the only known host of Gonococci
  - Highly co-exist with Chlamydia
- **Route of Transmission:**
  - Sexual contact:
    - Any type of sexual contact (Anal, Oral, Vaginal)





## CLINICAL PRESENTATIONS OF GONORRHEA

	Men	Women
<b>General</b>	Incubation period (1 - 14) days Symptoms onset: 2-8 days	Incubation (1 - 14) days Symptoms onset: 10 days
<b>Site of Infection</b>	Urethra*	Endocervical Canal*
<b>Symptoms</b>	<p style="text-align: center;"><b>Commonly Symptomatic</b> <b>May be Asymptomatic</b></p> <ul style="list-style-type: none"> <li>• Urethral infection: Dysuria &amp; urinary frequency</li> <li>• Anorectal infection: Asymptomatic to severe rectal pain</li> <li>• Pharyngeal infection: Asymptomatic to mild pharyngitis</li> </ul>	<p style="text-align: center;"><b>May be Asymptomatic or minimally symptomatic</b></p> <ul style="list-style-type: none"> <li>• Endocervical infection: Asymptomatic or mildly symptomatic</li> <li>• Urethral, Anorectal and pharyngeal infection: symptoms similar to men</li> </ul>
<b>Signs</b>	Purulent urethral or rectal discharge	Abnormal vaginal Discharge or uterine Bleeding; Purulent urethral or rectal discharge
*Most common		

# GONORRHEA

## Complications of Untreated Gonorrhoea

- Disseminated Gonorrhoea
  - ♀ > ♂
- Women:
  - Pelvic Inflammatory Disease
  - Ectopic Pregnancy
  - Infertility
  - Ophthalmic neonatorum
- Men
  - Rare (epididymitis, prostatitis, inguinal lymphadenopathy, urethral stricture)

