

PHB



Dr. Arvind Kumar Gupta
(M.Pharm, PDCR, PGDMM & Ph.D)
GATE 2003 Qualified with 97.2 percentile
Dr. S. N. Dev College of Pharmacy
Shamli (U.P.)

OFFICE: BUILDING No. 3/314, OFFICE-1, GAUSHALA ROAD, SHAMLI DISTRICT SHAMLI (U.P.) – 247776
Mobile: +91-9719638415
Email: arvindrkgit@gmail.com

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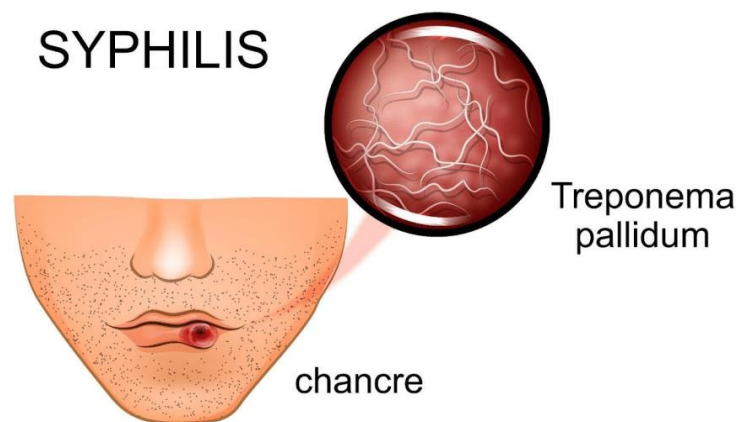
Chapter– 8 Infectious Diseases

Topic: SYPHILIS

8.1

Introduction

Syphilis is a sexually transmitted infection (STI) that can cause serious health problems if left untreated. Syphilis is a bacterial infection caused by *Treponema pallidum* that can affect various parts of the body, including the skin, mucous membranes, and organs.



8.2

Etiopathogenesis

Some of the common causes include:

- 1. Sexual transmission:** Syphilis is primarily spread through sexual contact with an infected person.
- 2. Mother-to-child transmission:** Syphilis can be transmitted from an infected mother to her child during pregnancy or childbirth.
- 3. Blood transfusion:** Syphilis can be transmitted through blood transfusion from an infected donor.

8.3

Types

Some common type of Syphilis includes:

- 1. Primary Syphilis:** The initial stage of syphilis, which occurs within 2-12 weeks after exposure to the bacteria. Symptoms: A small, painless sore or chancre appears at the site of infection, usually on the genitals, anus, or mouth.
- 2. Secondary Syphilis:** The second stage of syphilis, which occurs within 2-8 weeks after the primary stage. Symptoms: A rash appears on the palms of the hands and soles of the feet, along with fever, headache, fatigue, and swollen lymph nodes.
- 3. Latent Syphilis:** A stage of syphilis where there are no visible symptoms, but the bacteria are still present in the body. Duration: Can last for months or years.
- 4. Tertiary Syphilis:** The final stage of syphilis, which can occur years or decades after the initial infection. Symptoms: Can cause serious health problems, such as neurosyphilis, cardiovascular syphilis, and gummatous syphilis.

8.4

Symptoms

The symptom commonly includes:

Primary Syphilis (Weeks 1-4)

- 1. Painless sore:** A small, painless sore or chancre appears at the site of infection.
- 2. Swollen lymph nodes:** Lymph nodes in the groin area may become swollen.

Secondary Syphilis (Weeks 5-24)

- 1. Rash:** A rash appears on the palms of the hands and soles of the feet.
- 2. Fever:** A low-grade fever may occur.
- 3. Headache:** A headache may occur.
- 4. Fatigue:** Feeling tired or weak.
- 5. Swollen lymph nodes:** Lymph nodes in the neck, armpits, and groin area may become swollen.

8.5

Diagnosis

Diagnostic procedures may include:

- 1. Physical examination:** A thorough physical examination.
- 2. Blood tests:** Blood tests can detect the presence of syphilis antibodies.
- 3. Rapid plasma reagin (RPR) test:** A blood test that detects the presence of syphilis antibodies.
- 4. Venereal disease research laboratory (VDRL) test:** A blood test that detects the

presence of syphilis antibodies.

5. Fluorescent treponemal antibody absorption (FTA-ABS) test: A blood test that detects the presence of syphilis antibodies.

8.6

Pharmacological managements

Medications:

- 1. Penicillin:** The primary treatment for syphilis is penicillin, which is effective against the bacteria that cause syphilis.
- 2. Doxycycline:** Doxycycline is an alternative treatment for syphilis, but it is not as effective as penicillin.

8.7

Non - Pharmacological managements

Non-pharmacological management of Syphilis disorder includes:

- 1. Safe sex practices:** Practicing safe sex, such as using condoms consistently and correctly.
- 2. Regular testing:** Getting tested regularly for STIs, including syphilis.
- 3. Avoiding multiple sex partners:** Reducing the number of sex partners to reduce the risk of transmission.
- 4. Avoiding sex with someone who has syphilis:** Avoiding sex with someone who has syphilis until they have completed treatment.

8.8

Complications

Complications of untreated Syphilis:

- 1. Meningitis:** Inflammation of the membranes surrounding the brain and spinal cord.
- 2. Encephalitis:** Inflammation of the brain.
- 3. Aortic aneurysm:** A bulge in the aorta, the main artery that carries blood from the heart.
- 4. Aortic regurgitation:** Leaking of the aortic valve, which can lead to heart failure.
- 5. Retinitis:** Inflammation of the retina, the light-sensitive tissue at the back of the eye.

Practice Questions

MULTIPLE CHOICE QUESTIONS

1. Syphilis is caused by which type of bacteria?
 - a) Streptococcus
 - b) Neisseria
 - c) Treponema
 - d) Staphylococcus
2. Which of the following is the primary route of transmission for syphilis?
 - a) Airborne transmission
 - b) Sexual contact
 - c) Contaminated food or water
 - d) Mosquito bite
3. The primary lesion of syphilis is known as:
 - a) Chancre
 - b) Papule
 - c) Vesicle
 - d) Pustule
4. Which stage of syphilis is characterized by the presence of secondary skin rashes and mucous membrane lesions?
 - a) Primary syphilis
 - b) Secondary syphilis
 - c) Latent syphilis
 - d) Tertiary syphilis
5. Which of the following tests is commonly used for the diagnosis of syphilis?
 - a) ELISA
 - b) PCR
 - c) VDRL
 - d) CBC
6. Neurosyphilis affects which part of the nervous system?

- a) Brain
 - b) Spinal cord
 - c) Both brain and spinal cord
 - d) Peripheral nerves
7. Which stage of syphilis is characterized by the development of gummas and cardiovascular complications?
- a) Primary syphilis
 - b) Secondary syphilis
 - c) Latent syphilis
 - d) Tertiary syphilis
8. Which antibiotic is commonly used for the treatment of syphilis?
- a) Penicillin
 - b) Ciprofloxacin
 - c) Doxycycline
 - d) Azithromycin
9. Congenital syphilis can result in which of the following complications in newborns?
- a) Bone deformities
 - b) Hearing loss
 - c) Dental abnormalities
 - d) All of the above
10. Which of the following preventive measures is NOT effective in reducing the risk of syphilis transmission?
- a) Using condoms during sexual intercourse
 - b) Practicing monogamy
 - c) Avoiding sharing needles or drug paraphernalia
 - d) Consuming antibiotics without medical supervision

FILL IN THE BLANKS

1. Syphilis is a sexually transmitted infection caused by the bacterium *Treponema* _____. (**pallidum**)
2. Syphilis can also be transmitted from an infected mother to her unborn child during _____. (**pregnancy**)
3. The primary symptom of syphilis is a painless sore called a _____ at the site of infection. (**chancre**)

4. Secondary syphilis is characterized by a rash that may appear on the palms of the hands and the _____ of the feet. (**soles**)
5. Syphilis can cause serious complications such as damage to the heart, brain, and _____ if left untreated. (**nervous system**)

SHORT ANSWER TYPE QUESTIONS

1. Describe the primary lesion of syphilis.
2. What is the main route of transmission for syphilis?
3. Name one test used for the diagnosis of syphilis other than VDRL.
4. Explain the term "latent syphilis."
5. What are the common symptoms of secondary syphilis?

LONG ANSWER TYPE QUESTIONS

1. Discuss the stages of syphilis and the characteristic symptoms of each stage.
2. Explain the diagnosis procedure of syphilis.
3. Describe the treatment options available for syphilis.
4. Discuss the impact of congenital syphilis on newborns and the measures to prevent mother-to-child transmission.
5. What strategies can be implemented to control syphilis spread in communities?

MCQ Answer

1.	C	3.	A	5.	C	7.	D	9.	D
2.	B	4.	B	6.	C	8.	A	10.	D
