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Course Name : D. Pharm

Year : Second Year

Subject Name: Pharmacotherapeutics

Topic Name : Gonorrhea

Chapter-8 Infectious Diseases

Topic: GONORRHOEA

8.1

Introduction

Gonorrhoea is a sexually transmitted infection (STI) caused by the bacterium Neisseria gonorrhoeae. It affects both men and women and can cause serious health problems if left untreated.



8.2

Etiopathogenesis

Some of the common causes include:

- 1. Vaginal sex: Gonorrhoea can be transmitted through vaginal sex with an infected partner.
- 2. Anal sex: Gonorrhoea can be transmitted through anal sex with an infected partner.
- **3. Mother-to-child transmission:** Gonorrhoea can be transmitted from an infected mother to her child during childbirth.
- **4. Infected bodily fluids:** Coming into contact with infected bodily fluids, such as semen, vaginal fluids, or blood, can transmit gonorrhoea.

8.3 Types

Some common type of Gonorrhoea includes:

- **1. Urethral Gonorrhoea:** This type of gonorrhoea affects the urethra, which is the tube that carries urine out of the body. Symptoms include painful urination, discharge, and itching.
- **2. Cervical Gonorrhoea:** This type of gonorrhoea affects the cervix, which is the lower part of the uterus. Symptoms include abnormal vaginal bleeding, pelvic pain, and discharge.
- **3. Rectal Gonorrhoea:** This type of gonorrhoea affects the rectum, which is the final portion of the large intestine. Symptoms include rectal pain, discharge, and bleeding.
- **4. Pharyngeal Gonorrhoea:** This type of gonorrhoea affects the throat. Symptoms include sore throat, fever, and swollen lymph nodes.
- **5. Disseminated Gonorrhoea:** This type of gonorrhoea occurs when the infection spreads to other parts of the body, such as the skin, joints, and heart valves. Symptoms include fever, chills, and joint pain.
- **6. Gonococcal Conjunctivitis:** This type of gonorrhoea affects the eyes. Symptoms include eye discharge, redness, and swelling.

8.4 Symptoms

The symptom commonly includes:

- 1. Painful urination: Burning sensation while urinating.
- 2. Discharge: Thick, cloudy, or yellowish discharge from the vagina or penis.
- **3. Abdominal pain:** Pain in the lower abdomen or pelvis.
- **4. Bleeding:** Unusual bleeding or spotting in women.
- **5. Testicular pain:** Pain or swelling in the testicles.

8.5 Diagnosis

Diagnostic procedures may include:

- **1. Urine test:** Urine sample is tested for the presence of gonorrhoea bacteria.
- 2. Swab test: A swab is taken from the cervix, vagina, or urethra to collect a sample for testing.
- 3. Blood test: Blood sample is tested for the presence of gonorrhoea antibodies.

8.6

Pharmacological managements

Medications:

Dual antibiotic therapy: Ceftriaxone and azithromycin are commonly used to treat gonorrhoea.

8.7

Non - Pharmacological managements

Non-pharmacological management of Gonorrhoea disorder includes:

- 1. Safe sex practices: Educate patients on safe sex practices, such as using condoms consistently and correctly.
- 2. Good hygiene: Encourage patients to practice good hygiene, such as washing their hands regularly and keeping their genital area clean.
- 3. Urination habits: Encourage patients to urinate after sex to help flush out bacteria.
- 4. Avoid irritants: Advise patients to avoid using scented soaps, bubble baths, or douches, which can irritate the genital area.
- 5. Abstinence: Advise patients to abstain from sex until they have completed treatment and their sex partners have been treated.

8.8

Complications

Complications of untreated Gonorrhoea:

- **1. Pelvic inflammatory disease (PID):** Gonorrhoea can cause PID, leading to infertility and chronic pain.
- 2. Epididymitis: Gonorrhoea can cause epididymitis, an inflammation of the epididymis.
- 3. Infertility: Untreated gonorrhoea can lead to infertility in both men and women.
- **4. Increased risk of HIV transmission:** Gonorrhoea can increase the risk of HIV transmission.

Practice Questions

	MULTIPLE CHOICE QUESTIONS						
1.	Gonorrhea is caused by which type of pathogen?						
	a) Virus						
	b) Bacterium						
	c) Protozoan						
	d) Fungus						
2.	Which of the following is a common symptom of gonorrhea in men?						
	a) Vaginal discharge						
	b) Dysuria						
	c) Lower abdominal pain						
	d) Pain during intercourse						
3.	The primary mode of transmission for gonorrhea is through						
	a) Airborne droplets						
	b) Direct contact with lesions						
	c) Ingestion of contaminated food						
	d) Vector-borne transmission						
4.	Which of the following diagnostic tests is most commonly used to confirm gonorrhea						
	infection?						
	a) Blood culture						
	b) Gram stain						
	c) Urine culture						
	d) Serological test						
5.	Gonococcal infection in women can lead to which of the following complications?						
	a) Prostatitis						
	b) Pelvic inflammatory disease (PID)						
	c) Epididymitis						
	d) Urethritis						
6.	The recommended first-line antibiotic for uncomplicated gonorrhea is						
	a) Azithromycin						

	b) Ceftriaxone					
	c) Doxycycline					
	d) Metronidazole					
7•	Gonorrhea infection increases the risk of which of the following sexually transmitted					
	infections (STIs)?					
	a) Chlamydia					
	b) Syphilis					
	c) Herpes simplex virus					
	d) Human papillomavirus (HPV)					
8.	Gonorrhea can affect which parts of the body?					
	a) Genital tract only					
	b) Respiratory tract only					
	c) Both genital and respiratory tracts					
	d) Gastrointestinal tract only					
9.	Which of the following populations is most at risk for gonorrhea infection?					
	a) Older adults					
	b) Children					
	c) Adolescents and young adults					
	d) Pregnant women					
10	• The development of antimicrobial resistance is a growing concern in the treatment					
	of gonorrhea. Which antibiotic class is NOT recommended for treating gonorrhea due to					
	high rates of resistance?					
	a) Fluoroquinolones					
	b) Cephalosporins					
	c) Macrolides					
	d) Penicillins					
	FILL IN THE BLANKS					
1.	Gonorrhea is a sexually transmitted infection caused by the bacterium Neisseria					
	(gonorrhoeae)					
2.	Gonorrhea can be transmitted through unprotected oral, vaginal, or anal					
	(sex)					
3.	The most common symptoms of gonorrhea in men include painful and					
	discharge from the penis. <i>(urination)</i>					

- 4. In women, gonorrhea can cause symptoms such as pelvic ______ and abnormal vaginal discharge. (pain)
- **5.** Gonorrhea can be diagnosed through laboratory tests such as ______ or swabs of infected areas. *(Urine sample)*

SHORT ANSWER TYPE QUESTIONS

- **1.** What is the gonorrhea?
- 2. Which is the causative agent of gonorrhea?
- **3.** Describe the common symptoms of gonorrhea in men and women.
- **4.** Discuss the complications associated with untreated gonorrhea infection.
- **5.** What are the potential consequences of antimicrobial resistance in the treatment of gonorrhea?

LONG ANSWER TYPE QUESTIONS

- 1. Describe the pathogenesis of gonorrhea.
- 2. Discuss the epidemiology of gonorrhea.
- **3.** Outline the current treatment recommendations for complicated gonorrhea infections.
- **4.** Explain the strategies for preventing gonorrhea transmission.
- **5.** Discuss the challenges and future directions in the management and control of gonorrhea.

MCQ Answer												
1.	В	3.	В	5∙	В	7•	A	9.	С			
2.	В	4.	C	6.	В	8.	C	10.	A			