Course Code: BCR 516 Course Name: Pathophysiology and Disease Management



GALGOTIAS UNIVERSITY

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# **Topic Covered**

- Introduction
- Symptoms
- Pathophysiology
- Diagnosis
- Treatment



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## **GONORRHOEA-Introduction**

- Gonorrhea is an infection caused by a sexually transmitted bacterium that infects both males and females.
- Gonorrhea most often affects the urethra, rectum or throat. In females, gonorrhea can also infect the cervix.
- Gonorrhea is most commonly spread during vaginal, oral or anal sex.
- But babies of infected mothers can be infected during childbirth. In babies, gonorrhea most commonly affects the eyes.
- Abstaining from sex, using a condom if you have sex and being in a mutually monogamous relationship are the best ways to prevent sexually transmitted infections.

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# **Symptoms**

• In many cases, gonorrhea infection causes no symptoms. Symptoms, however, can affect many sites in your body, but commonly appear in the genital tract.

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#### **Male Genital Tract**

- Painful urination
- Pus-like discharge from the tip of the penis
- Pain or swelling in one testicle

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# **Symptoms**

#### **Female Genital Tract**

- Increased vaginal discharge
- Painful urination
- Vaginal bleeding between periods, such as after vaginal intercourse
- Abdominal or pelvic pain



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# **Symptoms**

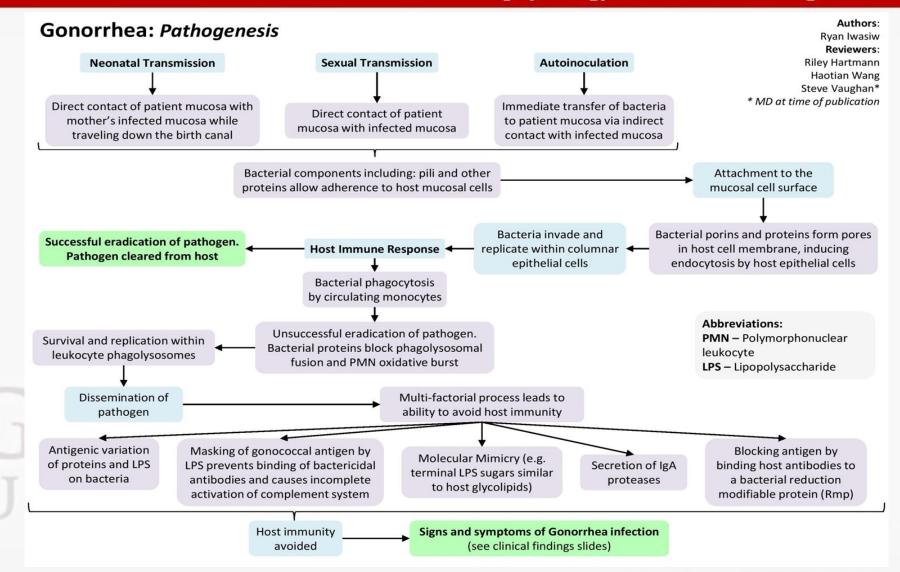
## **Other Sites of Body**

- Rectum: anal itching, pus-like discharge from the rectum, spots of bright red blood on toilet tissue and having to strain during bowel movements.
- **Eyes:** eye pain, sensitivity to light, and pus-like discharge from one or both eyes.
- Throat: sore throat and swollen lymph nodes in the neck.
- Joints: the affected joints might be warm, red, swollen and extremely painful, especially during movement

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# Complications

Untreated gonorrhea can lead to major complications, such as:

- Infertility in women. Gonorrhea can spread into the uterus and fallopian tubes, causing pelvic inflammatory disease (PID). PID can result in scarring of the tubes, greater risk of pregnancy complications and infertility. PID requires immediate treatment.
- Infertility in men. Gonorrhea can cause a small, coiled tube in the rear portion of the testicles where the sperm ducts are located (epididymis) to become inflamed (epididymitis). Untreated epididymitis can lead to infertility.
- Infection that spreads to the joints and other areas of your body. The bacterium that causes gonorrhea can spread through the bloodstream and infect other parts of your body, including your joints. Fever, rash, skin sores, joint pain, swelling and stiffness are possible results.
- Increased risk of HIV/AIDS. Having gonorrhea makes you more susceptible to infection with human immunodeficiency virus (HIV), the virus that leads to AIDS. People who have both gonorrhea and HIV are able to pass both diseases more readily to their partners.
- Complications in babies. Babies who contract gonorrhea from their mothers during birth can develop blindness, sores on the scalp and infections.

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## **DIAGNOSIS**

To determine whether you have gonorrhea, your doctor will analyze a sample of cells. Samples can be collected by:

#### 1. URINE

This can help identify bacteria in your urethra

#### 2. SWAB OF AFFECTED AREA

- A swab of your throat, urethra, vagina or rectum can collect bacteria that can be identified in a lab.
- For women, home test kits are available for gonorrhea. They include vaginal swabs for self-testing that are sent to a specified lab for testing. You can choose to be notified by email or text message when your results are ready. You can view your results online or receive them by calling a toll-free hotline

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## TREATMENT

- Adults with gonorrhea are treated with antibiotics.
- Due to emerging strains of drug-resistant Neisseria gonorrhoeae, the Centers for Disease Control and Prevention recommends that uncomplicated gonorrhea be treated with the antibiotic ceftriaxone given as an injection with oral azithromycin (Zithromax).
- If you're allergic to cephalosporin antibiotics, such as ceftriaxone, you might be given oral gemifloxacin (Factive) or injectable gentamicin and oral azithromycin.
- Babies born to mothers with gonorrhea who develop the infection can be treated with antibiotics.

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## Prevention

- To reduce your gonorrhea risk:
- Use a condom if you have sex. Abstaining from sex is the surest way to prevent gonorrhea. But if you choose to have sex, use a condom during any type of sexual contact, including anal sex, oral sex or vaginal sex.
- Limit your number of sex partners. Being in a monogamous relationship in which neither partner has sex with anyone else can lower your risk.
- Be sure you and your partner are tested for sexually transmitted infections. Before you have sex, get tested and share your results with each other.
- Don't have sex with someone who appears to have a sexually transmitted infection. If your partner has signs or symptoms of a sexually transmitted infection, such as burning during urination or a genital rash or sore, don't have sex with that person.
- Consider regular gonorrhea screening. Annual screening is recommended for sexually active women younger than 25 and for older women at increased risk of infection. This includes women who have a new sex partner, more than one sex partner, a sex partner with other partners, or a sex partner who has a sexually transmitted infection.
- Regular screening is also recommended for men who have sex with men, as well as their partners.

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