

INFECTIOUS GYNECOLOGIC DISORDERS

G'affarova Ruxshona Ruxshona Xamidullo kizi

Kokand University Andijan branch
Faculty of Medicine treatment direction**Abstract**

This article examines the primary etiological factors, clinical manifestations, diagnostic approaches, and modern treatment strategies of inflammatory gynecological diseases in women. The pathogenesis of infections such as vaginitis, endometritis, and salpingitis, along with their complications and antibiotic-based therapies, are analyzed based on scientific sources. The article also provides preventive measures to maintain reproductive health and reduce recurrent infections.

Keywords

gynecological infections, vaginitis, endometritis, salpingitis, antibiotic therapy, sexually transmitted infections, microbiota.

Introduction

Inflammatory gynecological diseases are among the most common conditions affecting women's reproductive systems. These disorders not only impair sexual and menstrual health but also negatively impact fertility and overall well-being. In recent years, the rise of sexually transmitted infections has led to an increase in IGDs. If not diagnosed and treated in time, these conditions can become chronic, resulting in infertility, ectopic pregnancy, and sexual dysfunction. Early diagnosis and appropriate management are critical to prevent such complications.

Infectious gynecological disorders are inflammatory diseases of the female reproductive system caused by various microorganisms. These diseases can affect the vagina, cervix, uterus, fallopian tubes, and ovaries. They may occur in acute or chronic forms and can lead to serious complications if not diagnosed and treated in a timely manner.

The main causative agents of infectious gynecological disorders include bacteria, viruses, fungi, and protozoa. Infection is most commonly transmitted through sexual contact; however, poor personal hygiene, weakened immune system, invasive medical procedures, and hormonal changes can also contribute to the development of these diseases.

These disorders are typically characterized by symptoms such as itching, burning sensation, abnormal vaginal discharge with an unpleasant odor, lower abdominal pain, menstrual irregularities, and general weakness. In some cases, the diseases may remain asymptomatic and are only detected after complications occur.

The major concern associated with infectious gynecological disorders is their negative impact on reproductive health. If left untreated, they can lead to infertility, pregnancy complications, and chronic inflammatory conditions of the uterus and ovaries. Therefore, early diagnosis, appropriate treatment, and preventive measures are essential.

Preventive strategies include maintaining proper personal hygiene, practicing safe sexual



behavior, strengthening the immune system, and undergoing regular gynecological examinations.

Main causes of disease. a) Infectious Factors (85–90%). Aerobic and Anaerobic Bacteria: *Streptococcus* spp., *Staphylococcus* spp., *Escherichia coli*, *Gardnerella vaginalis*, *Bacteroides* spp.

Sexually Transmitted Infections (STIs): *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, Herpes simplex virus (HSV), *Trichomonas vaginalis*, Human papillomavirus (HPV)

Fungi: *Candida albicans*, especially in cases of poor hygiene or improper antibiotic use

b) Non-infectious Factors

Decreased local immunity

Hormonal imbalance (e.g., estrogen deficiency during menopause)

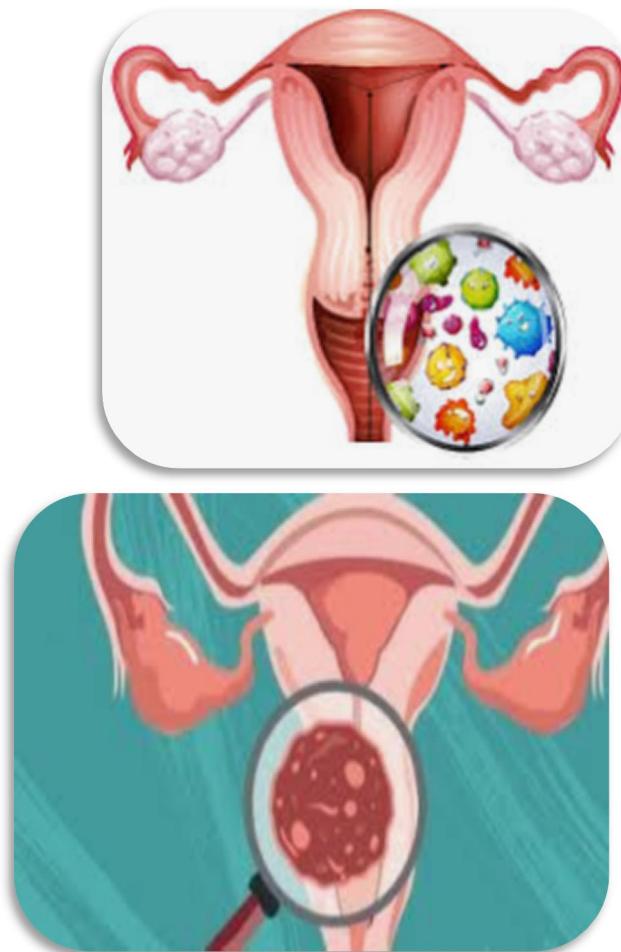
Improper use of intrauterine devices

Exposure to cold, stress, vitamin deficiencies

Misuse of vaginal douches and hormonal contraceptives

Disruption of the normal vaginal microbiota

- Note: Disruption of normal flora (*Lactobacilli/Döderlein bacilli*) leads to anaerobic overgrowth—main cause of bacterial vaginosis.



Major types of disease

a) Vaginitis. Inflammation of the vaginal mucosa. Types: Bacterial vaginosis, Candidiasis (yeast infection), Trichomoniasis



Bacterial Vaginosis (BV). Bacterial vaginosis is a condition caused by an imbalance in the normal bacterial flora of the vagina. It occurs when the naturally dominant lactobacilli are replaced by anaerobic bacteria such as *Gardnerella vaginalis*, *Mobiluncus*, *Mycoplasma hominis*, and others. Causes: Excessive vaginal douching, Multiple sexual partners, Use of intrauterine devices (IUDs), Use of antibiotics, Hormonal imbalances, Smoking

Symptoms: Thin, grayish-white vaginal discharge. Unpleasant, "fishy" odor, especially after intercourse. Itching and irritation may occur (but often absent). Burning sensation during urination (rare)

Prevention: Maintain proper vaginal hygiene, Limit number of sexual partners, Avoid unnecessary antibiotic use, Use condoms during sexual intercourse, Avoid vaginal douching.

In bacterial vaginosis, a "fishy" smell is typical. b) Endometritis. Inflammation of the uterine lining (endometrium) Common after childbirth, abortion, or intrauterine procedures. Symptoms: lower abdominal pain, low-grade fever, purulent discharge, uterine enlargement. Chronic endometritis may result if not treated adequately.

c) Salpingitis and Oophoritis (Adnexitis). Inflammation of the fallopian tubes and ovaries, often occurring together. Symptoms: bilateral lower abdominal pain, fever, menstrual irregularities, possible infertility. Chronic forms can cause irreversible tubal damage -Clinical note: Chlamydia is responsible for 60% of salpingitis cases and is a major cause of tubal infertility.

Diagnostic Methods.

a) Gynecological Examination, Assessment of vaginal and cervical condition, Bimanual palpation for pain and abnormal findings

b) Laboratory Testing. Vaginal smear microscopy (leukocytes, pathogens)

PCR (polymerase chain reaction) for STIs like chlamydia and gonorrhea

Vaginal pH testing — elevated in bacterial vaginosis. Culture tests to determine antibiotic sensitivity

c) Imaging and Procedures. Ultrasound (US): evaluation of uterus and ovaries

Colposcopy: visualization of the cervix Laparoscopy: used in complicated or chronic cases for both diagnosis and treatment.

Preventive Measures. Maintain personal and sexual hygiene, Practice safe sex with consistent condom use, Avoid indiscriminate use of antibiotics, Use pH-balanced feminine hygiene products, Limit the use of vaginal douches, Regular gynecological check-ups (at least once a year), STI screening (especially PCR tests) from age 18 onward. Restore vaginal flora after treatment with probiotics

Tip: Educating women on reproductive health and promoting preventive care can significantly reduce the incidence of IGDs.

Conclusion

Inflammatory gynecological diseases remain a major concern for women's health worldwide, particularly during the reproductive years when their impact can be most detrimental. Conditions such as bacterial vaginosis, pelvic inflammatory disease, endometritis, and cervicitis not only compromise reproductive function but also significantly affect a woman's overall quality of life. If left untreated, these infections can lead to long-term complications including infertility, chronic pelvic pain, ectopic pregnancies, and an increased risk of miscarriage.



Early detection and diagnosis through regular gynecological examinations and laboratory testing are crucial to identify these conditions in their initial stages. Treatment must be pathogen-specific and guided by antimicrobial sensitivity testing whenever possible to avoid antibiotic resistance and ensure effective recovery. Additionally, public health initiatives must emphasize the importance of personal hygiene, safe sexual practices, and timely medical consultations to prevent infection spread.

In conclusion, addressing inflammatory gynecological diseases requires a multifaceted approach involving prevention, education, early detection, and personalized care. Collaboration between health professionals, public health systems, and communities is key to safeguarding women's reproductive health and improving long-term health outcomes on a global scale.

References

1. Serova V.N. – Gynecological Inflammatory Diseases, Moscow, 2021
2. CDC – Pelvic Inflammatory Disease (PID) Guidelines, 2023
3. WHO – Sexually Transmitted Infections Surveillance Report, 2022
4. Turdiyeva N., Karimova D. – Fundamentals of Gynecology, Tashkent, 2020
5. Harrison's Principles of Internal Medicine, 21st Edition – Female Reproductive Tract Infections
6. Soper D.E. – "Pelvic Inflammatory Disease", Obstetrics & Gynecology, 2020
7. Myer L. et al. – "The Role of Vaginal Microflora in Reproductive Health", The Lancet, 2021

