

# MODERN APPROACHES TO THE DIAGNOSIS AND TREATMENT OF ENDOCERVICITIS AND COLPITIS IN PREGNANT WOMEN

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## Abstract

This article analyzes modern approaches to the diagnosis and treatment of endocervicitis and colpitis during pregnancy. Endocervicitis and colpitis are inflammatory diseases of the reproductive tract, which are more commonly observed during various stages of pregnancy. These conditions pose a serious threat to maternal health and may adversely affect fetal development. Therefore, early diagnosis and appropriate treatment are crucial to ensure a healthy pregnancy.

The article explores the effectiveness of modern laboratory tests and microscopic examinations for diagnosing endocervicitis and colpitis, as well as the application of microbiological and molecular diagnostic methods. In addition, the importance and effectiveness of combining antibiotics, antifungal agents, and immunomodulators in treatment are discussed in detail.

The article provides a comprehensive overview of the development of modern diagnostic approaches and effective treatment strategies for endocervicitis and colpitis during pregnancy. The study results demonstrate that these pathologies can be effectively managed through advanced diagnostic and therapeutic methods.

**Keywords:** Pregnancy, endocervicitis, colpitis, diagnosis, treatment, modern approach, microscopy, antibiotics, antifungal agents.

## Introduction

Women's health, particularly the early detection and effective treatment of inflammatory diseases during pregnancy, remains one of the priority areas in modern medicine. Hormonal and immunological changes occurring in a woman's body during pregnancy increase the susceptibility of the reproductive organs to various infections. As such, lower reproductive tract inflammatory diseases such as endocervicitis and colpitis are widespread among pregnant women, and failure to detect and treat these conditions in time may pose serious threats to both the mother and the fetus. This article examines the clinical course of endocervicitis and colpitis observed during pregnancy, modern diagnostic methods, and effective treatment approaches. In addition, scientific and





practical strategies to assess the impact of these diseases on pregnancy and prevent them are presented.

## LITERATURE REVIEW AND METHODS

In recent years, there has been a rising trend in the incidence of lower reproductive tract inflammatory diseases among pregnant women, including endocervicitis and colpitis. Both international and national literature report their negative impact on pregnancy outcomes, such as preterm labor, intra-amniotic infections, developmental delays, and congenital pathologies (Demchenko et al., 2020; WHO Guidelines, 2022).

Research shows that hormonal imbalance, disrupted vaginal microflora, and weakened immunity during pregnancy create favorable conditions for infectious inflammation (Sazonova L.I., 2019). In particular, there is an increase in infections caused by opportunistic microorganisms such as *Candida* spp., *Gardnerella vaginalis*, *Mycoplasma*, and *Ureaplasma* species.

Modern medical literature emphasizes the importance of molecular diagnostic methods such as PCR (polymerase chain reaction), nucleic acid amplification tests, microscopy, and culture techniques. In treatment, the use of combined local and systemic antimicrobial agents, probiotics, and immunomodulators is considered effective (Kulikova T.V., 2021).

This scientific article was prepared based on clinical observations and literature analysis. The following methods were employed:

1. Clinical-anamnestic method – Information on the patient's age, gestational age, disease duration, and clinical signs was collected.
2. Laboratory diagnostic methods –
  - Microscopic examination of vaginal and cervical discharges
  - Bacteriological culture and sensitivity testing of isolated microorganisms
  - PCR detection of infectious agents (*Chlamydia trachomatis*, *Mycoplasma*, *Ureaplasma*, *Gardnerella*, *Candida* spp.)
3. Instrumental methods – Colposcopy was used to assess the condition of the cervix and vaginal walls.
4. Treatment methods – Antimicrobial therapy, local treatment, and immunomodulators were used according to individual cases.
5. Statistical analysis – Data were processed using Excel and SPSS software, and the reliability of results was determined using the  $\chi^2$  (chi-square) test.

## RESULTS AND DISCUSSION

The study revealed a high incidence of endocervicitis and colpitis among pregnant women. Among 80 pregnant patients analyzed, 52 (65%) had colpitis, and 28 (35%) had endocervicitis. In many cases, these conditions co-occurred.

The etiological agents identified through laboratory tests were:

*Gardnerella vaginalis* – 38%

*Candida albicans* – 27%

*Ureaplasma urealyticum* – 19%

*Mycoplasma hominis* – 12%



Chlamydia trachomatis – 4%

PCR diagnostics demonstrated a higher level of sensitivity and specificity compared to traditional methods. Unlike microscopy and culture techniques, molecular diagnostics allowed for earlier and more accurate detection of pathogens.

After treatment, 86% of patients showed complete resolution of clinical symptoms. In the remaining 14%, recurrent infections were observed, usually associated with mixed microflora resistant to primary treatment. These cases required adjusted therapy involving combined antimicrobial agents and local probiotics.

It should be noted that infections related to altered vaginal flora during pregnancy—particularly endocervicitis and colpitis—may lead to serious complications, such as miscarriage, preterm birth, and neonatal sepsis caused by intra-amniotic infection. Therefore, timely diagnosis and the application of safe and appropriate treatment regimens are of paramount importance. These findings confirm the significance of modern diagnostic and therapeutic approaches, especially molecular diagnostics and comprehensive treatment strategies. Preventive measures and routine screening can further improve maternal and fetal outcomes.

**Table 1. Frequency of colpitis and endocervicitis among pregnant women (Including combined cases)**

Disease Type	Number of Patients (n=80)	Percentage (%)
Colpitis	52	65%
Endocervicitis	28	35%
Colpitis + Endocervicitis	18	22.5%*

\*Combined forms considered

**Table 2. Identified etiological agents (n=80)**

Microorganisms	Number of Cases	Percentage (%)
Gardnerella vaginalis	30	38%
Candida albicans	22	27%
Ureaplasma urealyticum	15	19%
Mycoplasma hominis	10	12%
Chlamydia trachomatis	3	4%

**Table 3. Treatment effectiveness**

Outcome	Number of Patients	Percentage (%)
Fully recovered	69	86%
Recurrent infection observed	11	14%



## CONCLUSION

Inflammatory diseases of the lower genital tract, particularly endocervicitis and colpitis, pose significant risks to maternal and fetal health during pregnancy. The study demonstrated a high prevalence of these conditions, often associated with mixed microflora. The high sensitivity of modern molecular diagnostic methods facilitates early identification of infectious agents and improves treatment outcomes.

The use of a comprehensive approach—including systemic and local antimicrobials, probiotics, and immunomodulators—proved effective in eliminating clinical symptoms in most patients. Therefore, routine screening and individualized therapeutic plans based on modern diagnostics are crucial to minimizing perinatal complications.

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