CLINICAL AND IMMUNOLOGICAL ASPECTS OF UREAPLASMA INFECTION IN WOMEN WITH CERVICAL EROSION

KHudaybaqova Mokhichekhra
1st year Master's Student, Department of Clinical Laboratory Diagnostics with the course of Clinical Laboratory Diagnostics of PGD
Daminov F.A.
DSc, Associate Professor, Head of the Department of Clinical Laboratory Diagnostics with the course of Clinical Laboratory Diagnostics of PGD
Samarkand State Medical University. Samarkand, Uzbekistan.

Introduction. Cervical erosion is one of the most common gynecological diseases among women and may occur in 30–50% of women of reproductive age. The disease often has an asymptomatic course; however, disruption of the anatomical and functional integrity of the cervical mucosa creates favorable conditions for the penetration of infectious agents. Ureaplasma infection is considered one of the important etiological factors in this process.

Keywords: *cervical erosion, ureaplasma infection, immunological mechanisms, clinical course, review thesis.*

Etiological and pathogenetic aspects. Ureaplasma urealyticum and Ureaplasma parvum are microorganisms lacking a cell wall and possessing the ability to adhere to epithelial cells. They damage the protective mucosal layer by producing phospholipases and proteases, which leads to an intensification of inflammatory processes.

Epidemiology. According to global literature data, the carriage rate of ureaplasma among women of reproductive age reaches 40–70%. In women with cervical erosion, this indicator is even higher and is often observed in association with chlamydial infection, mycoplasmosis, and bacterial vaginosis.

Clinical manifestations. The spectrum of clinical signs is broad; however, in most cases the disease proceeds with minimal symptoms. Patients may complain of cervical discharge, lower abdominal pain, discomfort, dyspareunia, and in some cases infertility. A chronic course contributes to the persistence and recurrence of cervical erosion.

Immunological mechanisms. Ureaplasma infection has a negative impact on local immunity. Studies demonstrate a significant decrease in secretory IgA levels, impaired T-lymphocyte activity, and increased production of pro-inflammatory cytokines (IL-1β, IL-6, TNF-α). These changes promote the maintenance of chronic inflammation.

Diagnostic methods. Polymerase chain reaction (PCR) is considered the gold standard for the detection of ureaplasma infection. In addition, bacteriological culture, serological methods, and colposcopy are important for assessing the condition of cervical erosion.

Treatment and prevention. Treatment strategies include antibacterial therapy combined with probiotics and immunomodulatory agents. Preventive measures involve regular gynecological examinations and early detection of infectious diseases.

Conclusion. Analysis of the literature indicates that cervical erosion and ureaplasma infection are interrelated pathological processes accompanied by immunological imbalance. A comprehensive approach is essential for effective prevention and treatment.

REFERENCES

1.Lawrie R. A., Ledward D. A. Lawrie's Meat Science. – 7th ed. – Cambridge: Woodhead Publishing, 2006. – 464 p.

2.Toldrá F. Handbook of Meat Processing. – Ames, Iowa: Wiley-Blackwell, 2010. – 584 p.

3.Aberle E. D., Forrest J. C., Gerrard D. E., Mills E. W. Principles of Meat Science. – 4th ed. – Dubuque: Kendall/Hunt Publishing Company, 2001. – 354 p.

4.Pearson A. M., Dutson T. R. Quality Attributes and Their Measurement in Meat, Poultry and Fish Products. – London: Blackie Academic & Professional, 1994. – 388 p.

5.Honikel K. O. Water-holding capacity of meat // Meat Science. – 1987. – Vol. 19, No. 1. – P. 1–18.

6. Huff-Lonergan E., Lonergan S. M. Mechanisms of water-holding capacity of meat: The role of postmortem biochemical and structural changes // Meat Science. – 2005. – Vol. 71, No. 1. – P. 194–204.