

EXTENDED COLPOSCOPY OF THE CERVIX FOR THE DIAGNOSIS OF HUMAN PAPILLOMAVIRUS INFECTION

Ishchenko Irina Viktorovna

Tashkent Pediatric Medical Institute

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Abstract. *World science is increasingly focusing on the high incidence and mortality of cervical cancer caused by the human papillomavirus (HPV). Increasingly, this pathology manifests itself in the young population (18-30 years old), a high contact infectious index, a tendency towards the progression of a chronic process. The study of the general colposcopic characteristics of the cervix of women with human papillomavirus infection is the purpose of this paper.*

Keywords: *world science, infectious, cervical cancer, general colposcopic characteristics, women.*

Actuality of paper. World science is paying more and more attention to the high morbidity and mortality from cervical cancer caused by the human papillomavirus (HPV). More often this pathology is manifested in the young population (18-30 years old), with a high contact-infection index, a tendency towards the progression of a chronic process. One of the informative clinical and endoscopic methods for diagnosing pathological processes in the cervix is colposcopy. The use of this method makes it possible to assess the prevalence of the lesion and to identify localization on the border of the squamous and cylindrical epithelium of the cervix.

The use of Schiller's test (2% Lugol's solution) and acetic test (3% acetic acid solution) allows assessing the condition of the epithelial and vascular walls.

Purpose. The study of the general colposcopic characteristics of the cervix of women with human papillomavirus infection.

Materials and methods. We conducted comprehensive examinations of women for the presence of human papillomavirus infection (PVI). An assessment of the condition of the genital organs was also carried out, with special attention to the condition of the cervix.

The examination included: careful history taking, formation of menstrual function, reproductive history, onset of sexual activity, sexually transmitted infections. A gynecological examination made it possible to assess the development of the external and internal genital organs, the presence of pathological changes in the perineum, vulva, Bartholin's glands, the state of the internal genital organs, and the nature of discharge from the genital tract.

67 women aged 16 to 45 were examined. In 21 (29.3%) patients, papillomavirus infection was diagnosed, detected by polymerase chain reaction (PCR) and cytological examination of smears taken from the site of the external os of the cervix, in which koilocytosis was detected.

Research results. During an extended colposcopy, genital warts were found in patients: vaginas - in 9 (42.8%) patients, cervix - in 3 (14.2%) women.

World science is increasingly focusing on the high incidence and mortality of cervical cancer caused by the human papillomavirus (HPV). Increasingly, this pathology manifests itself in the young population (18-30 years old), a high contact infectious index, a tendency towards the progression of a chronic process. One of the informative clinical and endoscopic methods for

diagnosing pathological processes in the cervix is colposcopy. The use of this method makes it possible to assess the prevalence of the lesion and to identify localization on the border of the squamous and cylindrical epithelium of the cervix.

The use of Schiller's test (2% Lugol's solution) and acetic test (3% acetic acid solution) makes it possible to evaluate the epithelial and vascular walls.

Extended colposcopy revealed ectopia of the transformation zone in 7 (33.3%) women on the exocervix. Ectopia with clear smooth edges was observed in 2 (9.5%) patients, and was determined by the colposcopic method as an area of bright pink color with a folded papillary surface. Such staining of ectopia is due to the translucence of blood vessels through a single-layer cylindrical epithelium. When conducting a test with 3% acetic acid, ectopia became pale. Schiller's test in the surrounding stratified squamous epilelia is positive.

The characteristics of colposcopic data are presented in the table.

| Colposcopic picture | Number of women | |
|--|------------------------|------------|
| | quantity | % |
| Ectopia (columnar epithelium) | 2 | 9,5 |
| Normal transformation zone | 2 | 9,5 |
| Normal transformation zone with exocervicitis | 7 | 33,3 |
| Transform Zone: Mosaic | 5 | 23,8 |
| Transformation zone: punctuation | 2 | 9,5 |
| Combination of mosaic, punctuation and iodine-negative zones | 1 | 4,7 |
| Genital warts on the cervix | 2 | 9,5 |
| Total | 21 | 100 |

In 2 (9.5%) patients, with a normal transformation zone, after the test with acetic acid, areas of acetowhite epithelium were detected, which looked like iodine-negative on the Schiller test.

In 29.4% of cases, during colposcopy, the transformation zone was accompanied by signs of a pronounced inflammatory process: fuzzy boundaries between the columnar epithelium and stratified squamous epithelium, friability of the cervical tissue. The vascular network had a tortuous character, the vessels reacted to acetic acid by contraction.

An atypical transformation zone was detected in 10 (47.6%) patients, while the atypical epithelium, after a test with acetic acid, looked like acetowhite in the form of a "delicate" mosaic and punctures.

In 5 out of 10 (23.8%) patients, after a test with acetic acid, a "delicate" mosaic was determined and, against the background of whitish areas of the epithelium, pink dots were distinguished. The altered areas did not rise above the level of the squamous epithelium, with clear boundaries separating them from the unchanged epithelium.

In 2 (9.5%) women, "gentle" puncture was revealed - areas of squamous epithelium, divided into segments. Schiller's test is positive.

In 1 (4.7%) patient, at the junction of the columnar epithelium and the stratified squamous epithelium, a combination of various colposcopic patterns was observed: mosaics, punctures, iodine-negative zones. These areas did not rise above the level of the squamous epithelium, the boundaries of the areas are fuzzy, the Schiller test is positive.

In 2 (9.5%) patients, colposcopically revealed genital warts on the cervix, which looked like raised whitish formations of irregular shape (after the test with acetic acid).

Thus, the frequency of detection of human papillomavirus infection was 29% in women of reproductive age. The colposcopic picture in this pathology was characterized by the predominance of the atypical transformation zone (37%).

However, no signs of cervical cancer were found in any of the cases. The combined use of PCR diagnostics and colposcopy increases the reliability of the diagnosis of human papillomavirus infection and allows early detection and timely treatment of precancerous conditions of the cervix.

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