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Clinical Errors in the Diagnostic of Cervical Dysplasia. Clinical Cases

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ABSTRACT

Introduction: *The cervical screening goal is to detect and treat precancers before cancer. We wanted to understand why errors in the clinical diagnostic and management of patients with persistence of human papillomavirus (HPV); infection occur in gynecological practice.*

Aim: *Aim of the study was to evaluate 3 clinically important complications of situations for women aged 18-45 years. The study aimed to assess the diagnostic accuracy by colposcopy visualization, cytology and biopsy results, and presence of HPV infection. We aimed to analyze the false-negative (FN) cytology diagnoses inpatients with presence of HPV, colposcopy visualization, histologically proven cervical intraepithelial neoplasia (CIN) 2-3.*

Material and Methods: *A retrospective analysis of errors in the management of patients was carried out, in treatment methods, especially with the use of cryodestruction, colposcopy pictures, results of cytological and histological conclusion, results of examination for oncogenic types of papillomavirus were presented.*

Discussion: *After analyzing all errors in the management of patients with persistence of papillomavirus and preliminary cryotherapy of the cervix, the main reasons that led to the progression of the disease up to cervical cancer were noted.*

Conclusion: *In the presence of papillomavirus, cryodestruction of the cervix is not advisable, even if no cervical dysplasia was detected by histological conclusions*

Keywords

False-negative (FN) cytology, Human papillomavirus (HPV), Cryodestruction, Cervical intraepithelial neoplasia, Errors.

Introduction

The diagnostic value of preventive screening examinations of the cervix in different countries of the world has one most important goal - to detect cervical dysplasia, to control a woman, to treat in time and not to start the process before the development of oncology.

Screening programs for various national protocols include co-testing – cytology and examination for papillomavirus at different intervals. In the countries of Eastern Europe, in particular Ukraine, preventive examinations are held once a year, in Western Europe, America 1 time in 3 years [1-3].

This is due not only to outdated protocols or excessive care for women's health, but also to a sufficient number of errors in diagnosing the work of both the obstetrician-gynecologist and the cytological service. False negative results or misinterpretation of

ASCUS is one of the most common mistakes [4-6]. Cytological screening is a priority and is funded by the National Health Service of Ukraine, but papillomavirus testing is not paid for by the state and patients are recommended to undergo this examination at your own expense (30-40 dollars) [7]. And not every woman can allocate the necessary amount due to the economic situation, especially in the last 2 years of martial law in Ukraine.

The sensitivity of the Pap smear (cytology) continues to be a matter of debate [8,9]. HPV DNA testing and histological examination of the material during colposcopy remains the gold standard for diagnosis and selection of the next treatment method [9]. The absence of cervical dysplasia during histological examination against the background of the persistence of papillomavirus makes it legal for the doctor to recommend cryodestruction of the cervix to patients.

The aim of the study was to evaluate 3 clinically important complications in women aged 18 to 45 years.

Materials and methods

These studies are carried out on a gynecological clinic in Yu. Lypy Lviv regional hospital of disabled people of war and repressed. Errors in the treatment of patients were retrospectively analyzed, treatment methods were proposed, in particular using cryodestruction, colposcopic images, results of cytological and histological conclusions, finds of carcinogenic papillomavirus. We report 3 cases of clinical errors in the diagnosis and management of cervical dysplasia screening.

Case presentation

Clinical case- 1

A 41-year-old woman from the Lviv region, Ukraine, went to a gynecological clinic in Yu. Lypy Lviv regional hospital of disabled people of war and repressed for aannual examination by a gynecologist. Menarche began at the age of 12, sexual life at the age of 19, pregnancy 4, childbirth 2, miscarriages 2. The patient had no problems with complaints about gynecology. Social, environmental, family and work history in the past is unremarkable. She never smoked, drank alcohol a little, and took ibuprofen to treat rheumatoid arthritis.

Physical examination revealed adenomyosis, endometriosis of the cervix. Ultrasound - adenomyosis. During colposcopy, the cervix is clean, endometriosis, signs of endocervicitis, after treatment with vinegar - a clear acetowhite region at 12 o'clock of zone II, cytology ASCUS, HPV + 18, Histology - without signs of dysplasia and atypia (Figure 1).

Cryodestruction of the cervix was performed without complications. Examination 3 months after cryotherapy revealed absent of acetowhite region (Figure 2). Cytology IIa-IIb (ASCUS) HPV+18,

Figure 1: Colposcopy visualization at initial examination.

Figure 2: Colposcopy picture for 3 months after cryotherapy.

1 year after cryotherapy, cytology IIIa-IIIb, HPV + 18, colposcopy picture of severe dysplasia, suspected cervical cancer. Histologically Cr 0 (Figure 3).

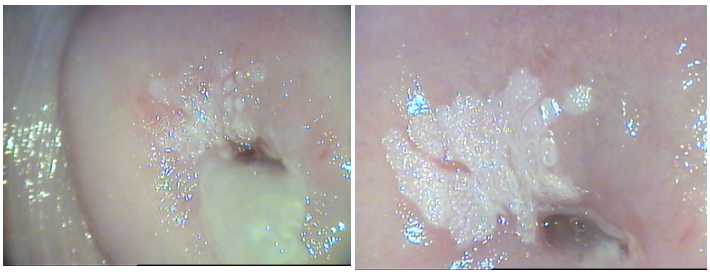

Figure 3: Colposcopy picture for 12 months after cryotherapy.

Assessing the management of the diagnosis and treatment of this patient, it should be noted that according to the protocols for the provision of medical care, cryodestruction was not contraindicated. However, we are not always able to assess another comorbidity – rheumatoid arthritis, the state of immunity and predict the development of the oncological process.

Clinical case - 2

A 32-year-old woman from the Lviv region, Ukraine, went to a gynecological clinic for annual examination by a gynecologist. Menarche began at the age of 13, sexual life at the age of 19, pregnancy 3, childbirth 2, miscarriage 1. The patient had complaints of bad vaginal odor. Social, environmental, family and work history in the past is unremarkable. She smoked 5 cigarettes a day, drank alcohol a little, and no took long-term medication.

On physical examination without pathology. Ultrasound is the norm. During colposcopy - atypical colposcopy picture, in the smear of vaginal secretions - Gardnerella vaginalis, leukocytes are normal, cytology ASCUS, HPV - negative, histology - cervical dysplasia II stage Hsil (Figure 4).

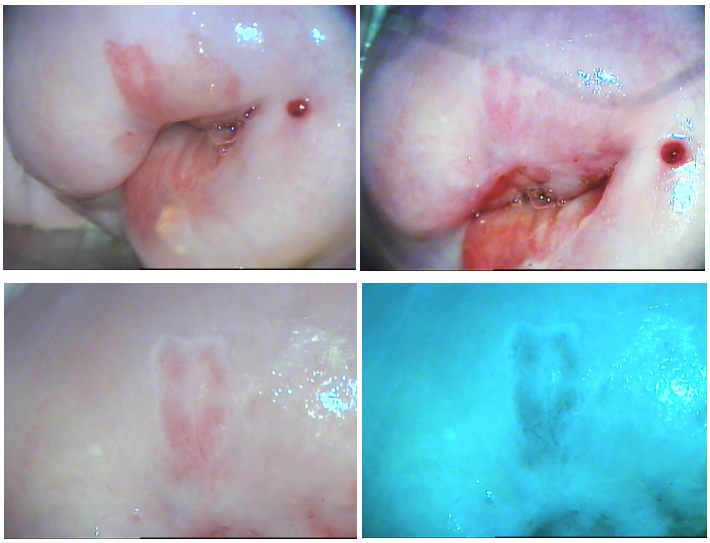

Figure 4: Colposcopy pattern during initial examination.

After treatment of bacterial vaginosis, the colposcopy picture did not change much (Figure 5). The clinical situation and diagnosis were explained to the patient, expectant and operative treatment tactics were offered, but the woman categorically refused the expectant treatment tactics.

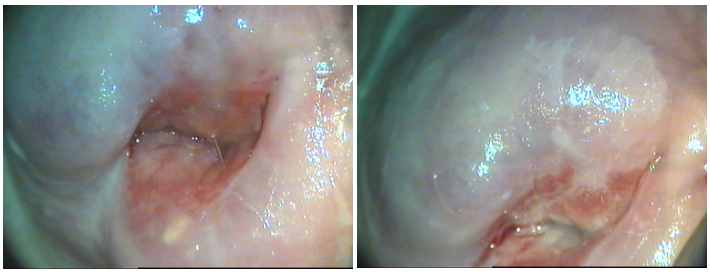

Figure 5: Colposcopy after treatment of bacterial vaginosis with histologically confirmed cervical dysplasia II stage Hsil.

Conization of the cervix was performed, the colposop picture 3 months after the operation is presented in Figure 6.

Figure 6: Colposcopy painting after conization.

Clinical case -3

An 18-year-old woman from Lviv, Ukraine, went for an annual gynecological check-up. Menarche began at the age of 14, sexual life at the age of 15, pregnancy 0, the patient's main complaints were symptoms of recurrent thrush. Social, environmental, family and work history in the past are unremarkable. She smoked 3-4 cigarettes a day, did not drink alcohol, and took long-term medication. I have been examined by a gynecologist for the last 2 years - 2 times, she treated candidiasis.

On physical examination without pathology. Ultrasound is the norm. Colposcopy - atypical colposcopy picture, cervical ectopy, areas of Hsil dysplasia, suspected cervical cancer, in a smear of vaginal secretions - Gardnerella vaginalis, in culture of Ureaplasma micronum and Ureaplasma urealyticum more than 5 at 106 CFU/g, leukocytes 40-50, cytology IIa-IIb (ASCUS), HPV +16t, Histology -Hsil - Cr 0 (Figure 7).

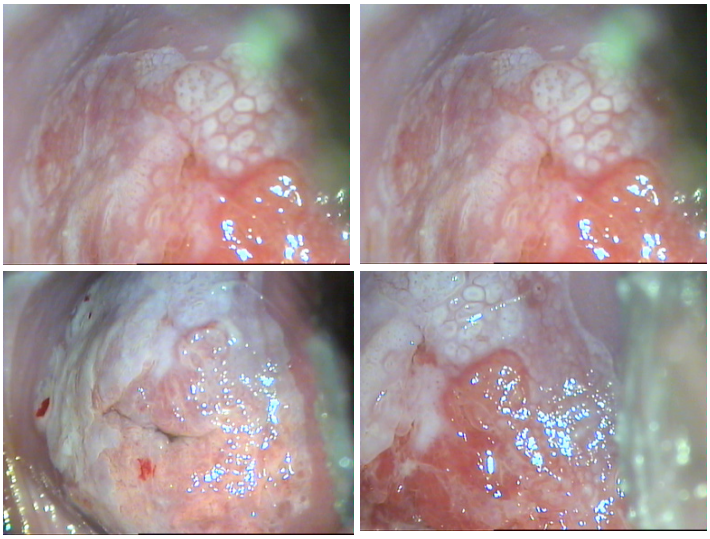

Figure 7: Colposcopy pattern during initial examination.

In the situation of this 18-year-old patient, the main thing was to determine the management strategy – conservative treatment

or conization, how long to wait 3-6 months, treatment of co-infection, and treatment of papillomavirus.... Individualization of the approach is always an important step in treatment, but cervical conization was performed 2 weeks after diagnosis and confirmed by Cr 0. In contrast to European protocols, treatment of Ureoplasma and antiviral therapy with valacyclovir were carried out. Independent pregnancies occurred as planned at the age of 23 and 27 years, without pathology of the course of pregnancy (the cervix was not pricked during pregnancy), 2 cesarean sections were performed. Papillomavirus during the annual examination is negative for the last 15 years.

Discussion

Every year, a month of examination for cervical cancer is held in Ukraine, where patients are informed about the problems of cervical cancer on TV and radio channels, in social networks, in hospitals, they are called for a free examination with cytology, but cotesting with papillomavirus is not included there. Not all outpatient offices are equipped with video colposcopes, so the only adequate solution to this problem is to massively treat the cervix with vinegar to assess the condition of the cervix, which creates negative feelings for some patients, especially against the background of colpitis.

Unlike European countries, vaccination against papillomavirus infection is not always supported by the female population of Ukraine, even if it is completely free of charge for virgin patients under 18 years of age. At the same time, the bulk of the female population is of the opinion that cervical cancer should be accompanied only by bleeding and pain. The old Soviet principles regarding preventive examination, which cannot be visited, but only bought and stamped in medical records, also reduce patients' visits to gynecologists.

In missed cases of cancer, it is often possible to note either the absence of colposcopy against the background of false-negative cytology results, or the tactics of monitoring the papillomavirus. Cryodestruction of the cervix, as a popular method of treatment in Ukraine against the background of papillomavirus persistence, should not be recommended, even if cervical dysplasia is not detected histologically.

The topic of clinical errors in the diagnosis and management of cervical dysplasia detection is relevant in different countries of the world, and work in this direction is continue [9-12].

Conclusions

The combined tactics of cytological screening, examination for papillomavirus, colposcopy with the histological conclusion of suspicious areas of the cervix will be able to preserve the health and life of our patients, will help reduce clinical errors in the diagnosis and treatment of cervical dysplasia.

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