



UTERINE ICHTHYOSIS AND THE POSSIBILITY OF DEVELOPMENT OF A MALIGNANT PROCESS ON THE EXAMPLE OF A CASE REPORT

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BACKGROUND

The article presents a clinical case of development of uterine ichthyosis in a patient in menopause. Considering the insufficient amount of data in the literature on this nosology as a predictor of a malignant process, we have described all the stages in making the correct diagnosis.

INTRODUCTION

Uterine ichthyosis is a rare disease in which all or almost all of the mucous membrane of the uterine cavity is replaced by stratified squamous epithelium. This condition is considered benign, but is associated with dysplastic changes and development of squamous cell carcinoma of endometrium. The etiology of malignant transformation is not completely clear.

The term of uterine ichthyosis was first introduced by Zeller in 1885. He described extensive keratinization of the endometrium due to intrauterine applications of hot formalin and iodine . Since then, similar changes have been identified in response to long-term inflammatory conditions of the endometrium, such as tuberculous endometritis, hyperplasia, and pyometra by Zeller in 1885. He described extensive keratinization of the endometrium due to intrauterine applications of hot formalin and iodine . Since then, similar changes have been identified in response to long-term inflammatory conditions of the endometrium, such as tuberculous endometritis, hyperplasia, and pyometra



Figure 1. Ultrasonography of the uterus.

CASE PRESENTATION

A 52-year-old female in menopause complained of hot flashes

Anamnesis: one childbirth, two induced abortions. Twice in 2014, she underwent loop electrosurgical excision procedures (LEEP) to treat her cervix for severe dysplasia.

Vaginal examination and colposcopy were normal. Ultrasonography (Fig. 1) showed the expansion of the uterine cavity up to 2 mm due to the liquid component, Doppler measurements were unremarkable. An increase in ESR up to 20 mm/hr. noted in the laboratory, the rest of the tests were within the age norm. The patient underwent hysteroscopy. At the stage of the cervical channel dilatation, up to 20 ml of turbid whitish liquid poured out of the uterine cavity, theage norm.

bacteriological examination of which showed the presence of Enterococcus faecalis colonies.

During hysteroscopy (Fig. 2), the mucous membrane of the uterine cavity was atrophic, having whitishshiny surface, without specifics. The endometrial mucosa was resected to the basal layer. Histological report showed an atrophic endometrium with foci of squamous metaplasia of the cervix.

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Five months later, the patient came to the clinic with complaints of aching pains in the lower abdomen. Bimanual examination accompanied by sharp pain, the body of the uterus moderately enlarged, and the vaginal discharge was mucous. Ultrasonography showed an increase in the uterus size up to 8-9 weeks, presence of heterogeneous content 38 mm thick expanding the uterine cavity. (Fig. 3)

Lab discovered an increase in ESR up to 20 mm/hr., while the rest of the tests were within the age norm.

Taking into account the patient's age, anamnesis data, history of previous surgical procedures, the presence of pyometra, the surgical treatment was proposed in the volume of extirpation of the uterus with appendages by the laparoscopic method.

During the uterine manipulator insertion, up to 100 ml of a turbid milky-gray liquid poured out of the uterine cavity, the bacteriological examination of which showed the presence of colonies of Staphylococcus epidermidis.

The operation took place without technical difficulties and the postoperative period was uneventful. Microscopy of the samples revealed

the uterine cavity was lined with stratified squamous epithelium;

afocal lymphoplasmacytic infiltration was discovered in the the fallopian tubes walls.

Though, the ovaries and cervix were normal.

The pathologist conclusion was as follows: morphological picture of **ichthyosis of the uterine cavity,**

chronic salpingitis of one fallopian tube and

hydrosalpinx of the other fallopian tube.

Given the rare diagnosis of uterine ichthyosis, a second histological evaluation was carried out:

“The endometrium is represented by stratified squamous epithelium with single endometrioid glands with signs of glandular hyperplasia with atypia, the spread of areas of severe dysplasia with the presence of carcinoma in situ with teardrop-shaped invasion (ICD-0 code 8070 \ 2)”



Figure 2. Hysteroscopy.



Figure 3. Sonography of the uterus

DISCUSSION

Cases of uterine ichthyosis associated with benign abnormalities, such as squamous cell papilloma of the uterus and prolapse have been reported, suggesting that this is mostly an incidental finding . Although this is a benign condition in itself, it has been established that ichthyosis of the uterus is associated with malignant transformation . In the literature, there are reports of cases of primary squamous cell carcinoma of the endometrium, arising on the background of dysplastic ichthyosis of the uterus, thus suggesting that this condition may have malignant potential .

I would like to draw your attention to the fact that the key position on early diagnosis in this clinical situation was played by total hysteroresection, and not just a biopsy of the endometrium. Despite the fact that during a visual examination with a hysteroscope, absolutely no changes in the mucosa were detected, the entire layer of atrophic endometrium was removed, in which the ichthyosis of the uterus was being found.

CONCLUSIONS

1. Any endometrium changes in women, especially menopausal ones, detected by ultrasound, should be regarded as a pathology that requires the process verification..
 2. Hysteroscopy with total endometrial resection allows confirming the presence of a pathological process in the uterine cavity.
 3. The combination of LEEP in menopause is especially alarming and has the right to a more detailed study and diagnosis4.
- Ichthyosis of the uterine body is a poorly studied pathological process that requires targeted and detailed study in the aspect of a possible oncological process.