

Efficiency rating povidone-iodine in patients before surgery CIN II

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Cervical intraepithelial neoplasia – a violation of the structure, maturation and maturation of cervical epithelium. Occurs with a frequency of 5% to 17% of the female population. To date, there has been a marked reduction in the incidence of this disease, despite the amount of research devoted to the study of this disease. The aim of our study was to evaluate the efficacy and safety of povidone-iodine prior to surgical treatment of patients with CIN II. We studied 60 patients aged 25 to 40 years diagnosed with CIN II, which faced a cervical conization. To pre-main group 33 patients used the drug povidone-iodine in the form of vaginal suppositories for 10 days, 1 St 1 time per day. Comparison group – women who did not spend vaginal. Proved good tolerance to povidone-iodine, the acceleration of epithelialization of the cervix, which allows you to qualify for a wider application of povidone-iodine in clinical practice.

Keywords: cervical Pathology, regeneration, destructive treatment, conization, CIN II, povidone-iodine.

Cervical dysplasia – is a precancerous condition. This means that women are diagnosed with cervical dysplasia in the future many times increases the likelihood of developing cervical cancer. However, this does not mean that cancer will develop in any case. Cervical dysplasia is characterized by marked hyperplasia (thickening), proliferation (proliferation), impaired differentiation, maturation, aging, and atypia of surface cells of cervical epithelium. According to research, only a quarter of women have cervical pathology. Moreover, 20% of non-pregnant women and 40% of pregnancies diagnosed with a precancerous condition – cervical dysplasia. Depending on the severity of the lesion, isolated grade 3 cervical dysplasia: mild, moderate and severe dysplasia of the cervix. Degree (or stage) cervical dysplasia is determined by the depth of penetration of pathological processes and the vastness of mucosal lesions with human papillomavirus (HPV). In normal epithelium on the surface of the cervix consists of four layers of stratified squamous epithelium. Changes in the surface layer of the epithelium is characterized by mild degree of cervical dysplasia, more pronounced changes (in all layers except the last) show severe dysplasia.

In modern medicine for the diagnosis and treatment of cervical pathology is often used cervical conization. Conization of the cervix – a procedure that removes a cone-shaped piece of the cervix, including the affected area. The resulting material is sent for histological examination for the diagnosis of the extent and depth of the lesion of cervical epithelium. There are three ways conization of the cervix:

- Knife (now rarely used, given the highest of all three methods the rate of complications).
- Laser.
- Loop electroconization cervix (the most common method).

This article will be discussed hinged electroconization of the cervix. Another name: LEEP (Loop Electrosurgical Excision Procedure) or LLETZ (Large Loop Electrosurgical Excision of Transformation Zone).

Contraindications for cervical conization are:

- Infectious inflammatory diseases of the female genital organs.
- Invasive cervical cancer.

Indications for conization of the cervix may be the presence of a pathological area cervical mucosa with the spread of pathology in the upper sections of the cervical canal. Pathology of cervical mucus include many conditions requiring further diagnostic steps and therapy. Conization in this case will help such a detailed study of the state of tissues and their treatment. Cervical dysplasia stage II-III also shown to extended biopsy or excision of the cervix. Before conization performed a pelvic examination, laboratory tests of blood and cytology (Pap test) study, in some cases, ultrasound, and colposcopy. The best time for conization of the cervix – this is the first few days after menstruation (5–11 th day from the beginning of the cycle).

One of the major problems when performing cervical conization there are complications during the postoperative period as a violation of the repair process. In most cases these disorders associated with changes in vaginal biopsy, which in turn may lead to inflammatory processes as maintenance of the vaginal mucosa and cervical mucosa. Coming out below, it is the aim of our study was to evaluate the results of the use of vaginal suppositories povidone-iodine in women before cervical conization, to reduce the incidence of postoperative complications.

MATERIALS AND METHODS

Work performed at the Department of Obstetrics and Gynecology, number 1 Vinnitsa National Medical University Pirogov Vinnitsya city clinical maternity hospital number 1.

The clinical and laboratory examination of 60 patients with their informed consent, in recompense from 25 to 40 years with cervical diseases, namely diagnosed CIN II, when showing cervical conization. Before surgery in 33 patients in Group 1 (main) used vaginal suppositories povidone-iodine, which was administered one time a day for 10 days. In group 2 (control group) – 27 women, disinfection prior cone biopsy was performed. The groups were comparable in age, reproductive history, education level and social status.

The study excluded patients with pelvic inflammatory disease, previously subjected to cervical manipulation in 3 months. To research and patient with serious comorbidities. Each patient was examined and assessed in accordance with the severity of disease. 45 patients (75.0%) had a history of childbirth. Abortion on medical history indicated Surveyed 51–85.4%. Among gynecological diseases in the first place in the incidence of chronic diseases are the uterus and appendages (chronic salpingo – 39 patients (65%), bacterial vaginosis – 37 patients (61.6%), vaginitis of various etiologies – 17 women (28.3%), uterine fibroids in 8 patients involved in this prospective study (13.3%). Duration observing cervical pathology (CIN) ranged from 6 months months to 3–5 years.

From prior therapies are the most common application of ointment, cryosurgery and diathermocoagulation cervical treatment Solkovagina. All women who participated in the study, conducted clinical, laboratory, instrumental and morphological studies. Clinical examination included collection of women's history, gynecological examination, a simple and extended colposcopy between the 8th and 12th days of the menstrual cycle

according to standard procedures. Classification colposcopic paintings carried out in accordance with international terminology colposcopic terms. Evaluation was carried out by vaginal biocenosis determining basic groups and opportunistic pathogenic microorganisms by quantitative real-time PCR. Cytological diagnosis was microscopic examination of smears from the surface of the cervix and cervical canal.

Electrocoagulation cervical loop was performed on day 8–10 of the menstrual cycle, which guaranteed the prevention of cervical endometriosis and create optimal conditions for regeneration, given the natural hormones. Radiosurgical ablation of diseased cervical mucus was carried out using the apparatus «Surgitron™» company «Ellman International, inc.» (USA), with an output current frequency 3.8 MHz, electrode modes «cut and coagulation» and cut. Duration of follow was 1.5 months. During this time conducted several check-ups: at 1 and 1.5 months after conization of the cervix. At the time of examination and treatment of patients were recommended barrier methods of contraception. Statistical processing was carried out by standard method of variation statistics. The significance of differences between the compared data were evaluated by Student's test.

RESULTS AND DISCUSSION

Main complaint of patients with diseases of the cervix were vaginal discharge. While all the women at the time of treatment were examined for infection, sexually transmitted infections, and also had negative findings on conditionally pathogenic microflora. The main objectives are to analyze colposcopy general state of the vagina, cervix (recovery). Clinical data and the results of colposcopy showed that all patients was white healing scab. Last, completely independently separated without pain and bleeding for 9–12 days of women in the study group. In this chylorrhoea practically absent (Mild only 1 patient). Temperature reaction, the presence of pain were absent.

Effectiveness of the therapy was evaluated on the following criteria: Full effect – unaltered stratified squamous epithelium throughout ekzotservikska, no relapse, cylindrical shape and rounded internal os. Complete epithelialization was observed in 26 – day 28 in the comparison group (20 patients – 74%) and 19–22-th day in – main (29 patients – 87.9%). Incomplete effect – unaltered stratified squamous epithelium throughout ekzotservikska except mucosal area covered by columnar epithelium, size greater than 5 mm around the external os or recurrent cervical disease after 12 months, or more, the main group in 4

surveyed (12%) with CIN II. In the comparison group in 7 patients (25.9%).

Lack of effect – a relapse of the cervix before 12 months, after treatment were observed in any of the groups that were involved in this prospective study. Thus, in all cases of cervical loop electrocoagulation noted the absence of rough scab after coagulation and bloodless procedure little sore, a significant reduction in time and rehabilitation operations. During colposcopy in the main control group of patients who received combination therapy (therapy povidone-iodine and loop electrocoagulation cervix), the average life complete epithelialization was 26.2±2.2 days. Apparently, this result is explained not only by the features of repair after exposure to radiofrequency (regenerative processes in the affected area are characterized by insignificant radiowave knife leukocyte infiltration and domination of the proliferative phase, provides reliable hemostasis and is accompanied by minimal lateral zone of coagulation necrosis), but pre-Vaginal and cervical povidone-iodine, which was the prevention of inflammatory complications.

In the comparison group surveyed after monotherapy (radiosurgical ablation of diseased cervical mucus) when colposcopy term complete epithelialization was 31.4±3.6 days. Bacterioscopic study after 1 month revealed that operational intervention that performs device «Surgitron™» company «Ellman International, inc.» (USA), with an output frequency of 3.8 MHz DC, did not have a pathological effect on vaginal biocenosis (absence of inflammation – the 100% is probably due to mandatory sanitizing preoperative preparation and sterilizing effect of the emitted radio waves).

The data presented showed the need for drug povidone-iodine on the preoperative period for improved tissue regeneration after loop conization of the cervix. In the study, side effects and you are hypersensitive to the drug povidone-iodine was noted. Early epithelialization after conization of the cervix was observed in major groups of women, which emphasizes on the need of chlorhexidine vaginal povidine before conization. Findings In assessing the effectiveness of intravaginal use candles povidone-iodine in women with cervical pathology (CIN II) after a readjustment before cervical conization found that this drug has a good tolerated and demonstrates bactericidal, anti-inflammatory and regenerative properties, as well as promotes complete epithelialization of the cervix, which allows to recommend wider use povidone-iodine in clinical practice.

Оценка эффективности использования препарата повидон-йод у пациенток перед хирургическим лечением CIN II Г.В. Чайка, О.А. Таран, Т.В. Лобастова

Цервикальная интраэпителиальная неоплазия (CIN) – нарушение строения, дифференциации и созревания эпителия шейки матки. Встречается с частотой от 5% до 17% среди женского населения. На сегодняшний день не отмечается снижения частоты этой патологии несмотря на большое количество исследований, посвященных изучению данной патологии. Целью нашего исследования являлась оценка эффективности и безопасности применения препарата повидон-йод перед хирургическим лечением пациенток с CIN II. Обследованы 60 пациенток в возрасте от 25 до 40 лет с диагностированным CIN II, которым предстояла конизация шейки матки. Для предоперационной подготовки у 33 пациенток основной группы использовали препарат повидон-йод в форме вагинальных суппозиториях в течение 10 дней по 1 суппозиторию 1 раз в сутки. Группа сравнения – 27 женщин, которым не проводили санацию влагалища. Доказана хорошая переносимость пациентками повидон-йода, ускорение процессов эпителизации шейки матки, что позволяет более широко использовать препарат повидон-йод в клинической практике.

Ключевые слова: патология шейки матки, регенерация, деструктивное лечение, конизация, CIN II, повидон-йод.

Оцінювання ефективності використання препарату повідон-йод у пацієнок перед хірургічним лікуванням CIN II Г.В. Чайка, О.А. Таран, Т.В. Лобастова

Цервікальна інтраепітеліальна неоплазія (CIN) – порушення будови, диференціації та дозрівання епітелію шийки матки. Зустрічається з частотою від 5% до 17% серед жіночого населення. На сьогоднішній день не відзначається зниження частоти цієї патології незважаючи на велику кількість досліджень, присвячених вивченню даної патології. Метою нашого дослідження було оцінювання ефективності та безпеки застосування препарату повідон-йод перед хірургічним лікуванням пацієнок з CIN II. Обстежено 60 пацієнок віком від 25 до 40 років з діагностованим CIN II, яким передбачено проведення конізації шийки матки. Для передопераційної підготовки у 33 пацієнок основної групи використовували препарат повідон-йод у формі вагінальних супозиторіїв протягом 10 днів по 1 супозиторию 1 раз на добу. Група порівняння – 27 жінок, яким не проводили санацию піхви. Доведена добра переносимість пацієнтками повідон-йоду, прискорення процесів епітелізації шийки матки, що дозволяє ширше використовувати препарат повідон-йод у клінічній практиці.

Ключові слова: патологія шийки матки, регенерація, деструктивне лікування, конізація, CIN II, повідон-йод.

ГИНЕКОЛОГИЯ

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REFERENCES

1. Zhukovskaja IG, MV Semenova Efficiency rating Iamateks (benzalkonium chloride) in women with cervical disease after using destructive methods of treatment // *Women's Health*. 2014; 2 (88): 97–100.
2. Antoniac MI, features clinics, diagnosis and treatment of cervical intraepithelial neoplasia cervical complicated cervicitis: Author. dis. ... cand. honey. Sciences: Kiev, 2012.
3. Damirov MM Radiowave, cryogenic and laser technologies in diagnosis and treatment in gynecology. Moscow: Bean. 2011. – 320 p
4. Cancer potential of various pathological conditions of the cervix // NL Ovsyankina, NY Melekhova, AN Ivanyan [etc.] // *Journal of obstetric and gynecological diseases*. – 2006. – T. L. – Issue 3. – S. 17–19.
5. Vakulenko G.A. Klyuchevye pathogenesis of cervical cancer, determining clinical perspectives // GA Vakulenko, EP Manzhura IB Shchepotin // *Women's Health* – 2006. – № 2 (26). – S. 202–206.
6. Rogovskaya SI Human papillomavirus infection in women and cervical pathology. To help the practitioner – M.: GEOTAR Media, 2010. – 192.
7. Cervical Cancer Prevention: A Guide for Physicians. – M.: MEDpress Inform. 2012. – 192.
8. Rogovskaya SI Cervix, vagina, vulva. Physiology, pathology, colposcopy, aesthetic correction // Lypova EV / Moscow. LLC Mediabyuro Presence Status. 2014. – P. 653–686. Brown J.S. Minor Surgery.
9. Jacus S. Margin status and excision of cervical intraepithelial neoplasia // Edmons P., Dunton C., King A.S. // *Obstet. Gynecol. Surv.* – 2000. – Vol. 55. – N 8. – P. 520–527.
10. Ramphul M. An unusual reproductive of consequence of needle exision of the transformation zone // Dimitriou E., Byrne B // *BMJ*. – 2008. – Vol. 337. – P. ai343.

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Ученые разработали метод для прогнозирования развития рака молочной железы в течение следующих двух-пяти лет. Посвященная работе исследователей статья была опубликована в журнале *Metabolomics*. разработали методику для предсказания вероятности развития рака молочной железы

На данный момент рак молочной железы можно диагностировать с помощью маммографии лишь тогда, когда он уже сформировался. Ученые смогли раз-

работать метод анализа крови, который способен предсказать вероятность развития рака груди в течение следующих двух-пяти лет с точностью 80%. Стоит отметить, что маммография, несмотря на то что анализирует уже появившееся образование, способна поставить верный диагноз с более низкой точностью – 75%.

Исследователи предложили подвергать кровь пациенток анализу не на конкретный биомаркер, а определять количество

всех содержащихся в ней компонентов. Ученые исследовали состав образцов крови, взятых в 1994-1996 годах у проживавших в Дании женщин. У 400 из них через несколько лет был обнаружен рак молочной железы, у 400 – нет. Результаты работы доказали, что новый метод анализа крови действительно способен предсказать риск развития злокачественной опухоли примерно на пять лет вперед.

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