тет беременностей составил 3 и более, из которых у 9 (45 %) пациенток развилась ГБН ($x^2 = 16,16$; $p < 0,001$).

Выводы

Таким образом, при анализе течения беременности исследуемых пациенток было установлено, что у женщин с резус-отрицательным фактором крови чаще течение беременности осложняется хронической плацентарной недостаточностью — у 11 (35,5 %) против 3 (9,4 %) из группы сравнения ($p = 0,029$), что обусловлено выбросом большого количества специфических антител (Ig G), нарушением плацентации и формирования ворсин, требует проведения специфического лечения.

Фактором риска развития ГБН является паритет беременностей 3 и более – при этом ГБН диагностирована в 45 % ($p < 0,001$), что обусловлено выбросом большого количества специфических Ig G, которые способны проникать в кровоток плода через гематоплацентарный барьер, вызывать гемолиз эритроцитов ребенка в ретикулоэндотелиальной системе. В результате резус-конфликта развивается гемолитическая болезнь плода.

При отсутствии антиэритроцитарных антител, у 16 (76,2 %) пациенток проведена специфическая иммунопрофилактика ($p < 0,001$), что говорит о необходимости повышения осведомленности беременных о патогенезе ГБН и увеличения иммунопрофилактики.

ЛИТЕРАТУРА

1. *Дударева, М.В.* Диагностика резус-конфликта и тактика ведения беременности / М.В. Дударева, В.В. Авруцкая // Медицинская иммунология. 2017. № S. С. 181–182.

2. *Кокорина, В. С.* Профилактика синдрома дыхательных расстройств новорожденного: еще раз подтвержденная эффективность / В. С. Кокорина, Л.Р. Лалаева , И. В. Фомина // Молодежный инновационный вестник. 2018. Т. 7, № S1. С. 106–107.

3. Преждевременные роды: изменения к лучшему / И. В. Фомина [и др.] // Современные проблемы науки и образования. 2017. № 5. С. 167.

UDC 618.14-007.61-006.6

CLINICAL EFFECTIVENESS AND DIAGNOSTIC VALUE OF COLOR DOPPLER ULTRASONOGRAPHY IN PATIENTS WITH ENDOMETRIAL HYPERPLASIA AND CARCINOMA

Addipalli Maanasa

Scientific supervisor: PhD, Associated Professor *Y. A. Lyzikova*

Educational Establishment
«Gomel State Medical University»
Gomel, Republic of Belarus

Introduction

Endometrial hyperplasia (EH) is the abnormal growth of the uterine endometrium. This abnormal growth may be due to estrogen stimulation or genetic mutations leading to uncontrolled proliferation [1]. Endometrial carcinoma (EC) is the most common gynaecologic malignancy in the developed world, and it has several histologic types [2]. As per epidemiological overview, the EH is 133 per 100,000 woman-years and EC is 25 per 100,000 woman-years. The histological variants of endometrial lesions can be resulted as Endometrioid carcinoma as type 1 EC typically develops from atypical endometrial hyperplasia, is hormonally responsive, and carries a favourable prognosis. Other histologic types are known as type 2 EC, they tend to present at more advanced stages, are not hormonally responsive, and carries out poor prognosis [3]. Women with both EH and EC tend to present with postmenopausal or irregular menstrual bleeding. Biopsy is required for definitive diagnosis of

EH and EC. The pelvic exam is usually normal. All women who present with abnormal bleeding especially postmenopausal bleeding should be assessed with pelvic ultrasonography, Trans-vaginal Color Doppler Ultrasonography (TV-CDU) and/or biopsy. Pelvic MRI may be indicated if ultrasound is unclear or to assess extent of disease. As our data carries out only postmenopausal women as an enrolled patients in this article, we tend to focus on the effectiveness of TV-CDU in differentiating between EH and endometrial carcinoma EC and in predicting tumor spread in these patients with EC [4]. Therefore, in our prospective study the subjected patients were categorized under the sequences of histological subtypes and directing them towards an appropriate diagnosis and tactics in the management of EH as well as EC by increasing the surveillance rate of 5 years and bringing out some good prognosis especially in patients with type 2 EC.

Goal

The purpose of this abstract is to understand the effectiveness and their diagnostic role of TV-CDU in differentiating EH and EC and to assess whether TV-CDU may be helpful in predicting endometrial tumor spread prior to surgery and also the sensitivity of transvaginal gray-scale sonography in differentiating between EH and EC was compared with sonographic and intratumoral blood flow findings.

Material and methods of the research

This article carries out a prospective diagnostic study among postmenopausal women. The data were collected from the Gynaecology department of Fortis Malar Hospital, Adyar, India. In this clinical study 56 patients with endometrial lesions (45–85 years) were enrolled in the assessment for EH and EC and carrying out histological data, endometrial biopsy, TV-CDU and intratumoral blood flow characteristics were analyzed using the resistance index (RI), pulsatility index (PI), and peak systolic velocity (PSV) and gray-scale sonography. Therefore, overall data was carried out as means, medians and standard deviation and analysed statistically by Analysis of Variance ANOVA and Using Spearman and regression tests, correlation analysis was performed to define the relationship of intratumoral blood flow rate with endometrial thickness, the degree of myometrial invasion, and the presence or absence of pelvic lymph node metastasis in patients with EC.

The results of the research and their discussion

This article consumes about 56 postmenopausal women who were enrolled in the development of EH and or EC. Initially, a biopsy curette was used and obtained two endometrial biopsy fragments. All TV-CDU examinations were performed within 4 weeks of biopsy and simultaneously carrying out their median age, thickness of endometrium, histological subtypes and grading of EC based on a diagnostic approach. Now among 56 enrolled patients, 17 patients been presented with EH and 39 with EC. The age of patients with EH ranged from 46–73 years (mean ± standard deviation is 61,2 ± 9,1 years), and the age of patients with EC ranged from 49–84 years (mean ± standard deviation is 60,4 ± 8,3 years). The endometrial thickness ranged from 1,4 to 72 mm in EH and from 5 to 90 mm in EC. Thus, although there were no patients who had endometrial carcinoma with an endometrial thickness < 5 mm, no significant difference was found in the mean value of endometrial thickness between patients with EH (n = 17 patients, 16,2 ± 15,8 mm) and EC (n = 39 patients, 18,7 ± 17 mm). These data are also confirmed in the studies of other authors [4].

The presence or absence of myometrial invasion also was assessed preoperatively by gray-scale sonography in all patients with endometrial carcinoma. However, only 8 of 39 patients (20 %) with myometrial invasion were diagnosed by gray-scale sonography. For future approaches to TV-CDU, the histology and the grading for EC play a vital role in these patients and they are represented graphically in the figure 1.

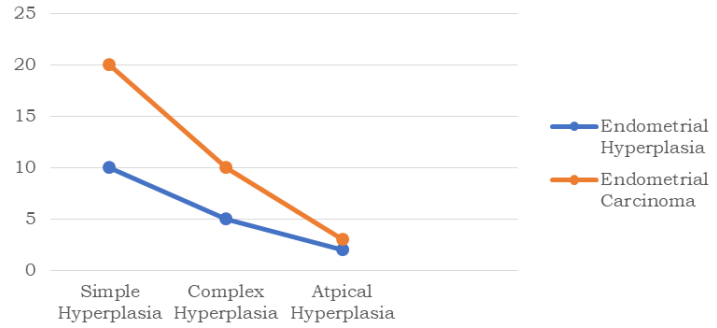

Figure1 — Histological Subtypes of the enrolled postmenopausal patients

The final histopathologic subtypes are seen above including gradings of EC and that consisted of 20 well-differentiated endometrioid carcinomas (Grade 1), 10 moderately differentiated endometrioid carcinomas (Grade 2), 3 poorly differentiated endometrioid carcinomas (Grade 3). Using Spearman and regression tests, a positive rate of intratumoral blood flow was correlated significantly especially in patients with Grade 3 ($P < 0,03$) when compared with Grade 1 and also correlated with endometrial thickness ($P < 0,002$), the degree of myometrial invasion ($P < 0,013$), and the presence or absence of pelvic lymph node metastasis in patients with EC ($P < 0,011$). After carrying out the complete data of intratumoral blood flow, it is necessary to evaluate the usefulness and diagnostic role of TV-CDU in these enrolled patients. In general TV-CDU can detect tumor vascularity in many human tumors. Malignant tumors tend to have rich intratumoral blood flow (neovascularization) compared with benign tumors. In the endometrium of postmenopausal women, the usefulness of TV-CDU in differentiating malignancies from premalignant or benign pathologic conditions has been controversial.

Therefore, in this article, we examined the characteristics of intratumoral arterial blood flow to assess precisely the neovascularization in malignant and premalignant lesions of the endometrium. After a thorough analyzation of subjected data's, we had consumed a high positive predictive value (97,4 %) and high specificity (94,5 %) in differentiating carcinoma from hyperplasia when the presence or absence of intratumoral blood flow was determined by TV-CDU. However, a somewhat low negative predictive value (42,1 %) was found using this method of diagnosis. Intratumoral blood flow was not determined in 10 of 56 endometrial carcinomas (18 %) by TV-CDU in our data. The reason may be that transvaginal resection or curettage of polypoid carcinomas may have removed large amounts of tumor tissue prior to the TV-CDU examination. Practically, in our data, 10 patients with polypoid carcinomas who had complained of massive vaginal bleeding at their first examinations were treated urgently by such resection of the main tumor prior to their TV-CDU examinations, although no patients with hyperplasia presented with such bleeding. However, in these cases, further refinements of current TV-CDU equipment will be needed. After ultrasonography, patients with EH underwent dilatation and curettage under hysteroscopic guidance, and patients with EC underwent hysterectomy, bilateral salpingo-oophorectomy, and pelvic lymph node dissection.

Conclusion

EH can leads to poor prognosis even though there is a good outcome in it. This is because, some patients tend to delay in the establishment of very well approached diagnostic methods and tactics to treat. That's why it is necessary to provide a relevant clinical history to aid a correct diagnosis. Therefore, in our data, TV-CDU is clinically and diagnostically helpful in showing a difference in tumor angiogenesis between EH and EC and may be more useful in differentiating carcinoma from hyperplasia compared with measuring endometrial thickness with gray-scale

sonography. In patients with EC in our study, the detection of intratumoral blood flow has shown to be helpful in distinguishing between low-grade and high-grade tumors and also in predicting myometrial invasion and priorly check-up in order to improve their morbidity rate from the development of EC.

LITERATURE

1. Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial hyperplasia/ T/ J. Clark [et al.] // Acta Obstet Gynecol Scand. 2001. Vol. 80(9). P.784–793.

2. Value of endometrial thickness measurement for diagnosing focal intrauterine pathology in women without abnormal uterine bleeding / E. Dreisler [et al.] // Ultrasound Obstet Gynecol. 2009. Vol. 33. P. 344–348.

3. Reappraisal of endometrial thickness for the detection of endometrial cancer in postmenopausal bleeding: a retrospective cohort study / S. Wong [et al.] // BJOG. 2016. Vol. 123. P. 439–446.

4. *Лызикова, Ю. А.* Гиперпластические процессы эндометрия в постменопаузе / Ю. А. Лызикова, А. Н. Лызиков // Проблемы здоровья и экологии. 2021. № 18 (1). С. 48–54.

UDK 618.146-006.6(540)

CERVICAL CANCER IN INDIA

Chithraseena Jayachandran Surya, Varghese Sogy

Scientific adviser: PhD, Associated Professor *I. A. Korbut*

Educational institution
«Gomel State Medical University»
Gomel, Republic of Belarus

Introduction

Each year, more than half a million women are diagnosed with cervical cancer and the disease results in over 300 000 deaths worldwide [1]. High-risk subtypes of the human papilloma virus (HPV) are the cause of the disease in most cases. The disease is largely preventable. Approximately 90 % of cervical cancers occur in low-income and middle-income countries that lack organised screening and HPV vaccination programmes. In high-income countries, cervical cancer incidence and mortality have more than halved over the past 30 years since the introduction of formal screening programmes. Treatment depends on disease extent at diagnosis and locally available resources, and might involve radical hysterectomy or chemoradiation, or a combination of both [2]. Conservative, fertility-preserving surgical procedures have become standard of care for women with low-risk, early-stage disease. Advances in radiotherapy technology, such as intensity-modulated radiotherapy, have resulted in less treatment-related toxicity for women with locally-advanced disease. For women with metastatic or recurrent disease, the overall prognosis remains poor; nevertheless, the incorporation of the anti-VEGF agent bevacizumab has been able to extend overall survival beyond 12 months. Preliminary results of novel immunotherapeutic approaches, similarly to other solid tumours, have shown promising results so far [1].

Aim

To identify the etiology cervical cancer, review the evaluation of a patient with cervical cancer, summarize the treatment and management options available for cervical cancer and describe interprofessional team strategies for improving care coordination and outcomes in patients with cervical cancer.

Material and methods of the research

The literature, case reports and statistical data on recent studies were analyzed.

The results of the research and their discussion

Cervical cancer, caused by HPV, is the third leading malignancy among women in the world, after breast cancer and colorectal cancer, with an estimated 527,624 new cases and 265,653 deaths in 2021. Incidence and mortality rates have been declining in most areas of the world in the past 30 years, at a worldwide rate of about 1.6 percent per year. This decline is a result of increased access to health