LATEST DIRECTIONS OF MODERN SCIENCE

Abstracts of III International Scientific and Practical Conference

Vancouver, Canada

(January 23 – 25, 2023)

UDC 01.1

ISBN - 978-9-40365-682-3

The III International Scientific and Practical Conference «Latest directions of modern science», January 23 – 25, Vancouver, Canada. 304 p.

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The recommended citation for this publication is: Veresha R. International anticorruption regulations. Abstracts of III International Scientific and Practical Conference. Vancouver, Canada. Pp. 120-122.

URL: https://eu-conf.com/ua/events/latest-directions-of-modern-science/

MEDICINE LATEST DIRECTIONS OF MODERN SCIENCE

HYPERPLASTIC PROCESSES OF THE ENDOMETRIUM - A CURRENT PROBLEM TODAY

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The actual problem of today is the hyperplastic processes of the endometrium, which is caused primarily by a high risk of malignant transformation, conditions associated with menstrual cycle disorders, abnormal uterine bleeding and anemia in women, pathology of gestation.

In recent years, a lot of information has been accumulated about the etiology, pathogenesis, diagnosis and treatment of this condition.

The endometrium is a hormone-sensitive tissue that has the ability not only to cyclical renewal of almost the entire cellular composition, but also to a certain response to all changes in hormones, cytokines, adhesion molecules, growth factors, biogenic amines and other biologically active substances at the level of the whole organism.

Hormonal causes, such as estrogen stimulation in combination with progesterone deficiency, hormone-independent proliferation, inflammation, decreased apoptosis, pathological neoangiogenesis, and immune disorders in the endometrium, play an important role in the development of endometrial hyperplastic processes.

Hyperplastic processes of the endometrium often occur in women of reproductive and premenopausal age. According to the literature, the frequency of endometrial hyperplastic processes (HPE) in the structure of gynecological diseases ranges from 15 to 50% [6,8]. In recent years, there has been an increase of endometrial pathology in women of all age groups [3, 5], which is associated with an unfavorable environmental situation and decreased immunity in women. Also, risk factors for HPE are: age older than 35 years, absence of pregnancy, late menopause, early menarche, liver and gall bladder diseases, autoimmune processes, smoking, family history of endometrial, ovarian, colon cancer, obesity and type II diabetes [4]. The frequency of malignant transformation of endometrial hyperplastic processes varies within 20-30% and is determined by the morphological and immunohistochemical features of the disease, its duration, and the frequency of relapses, also age and concomitant somatic pathology of the patients [4]. Among patients of reproductive age with infertility,

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hyperplastic processes of the endometrium are detected with a frequency of up to 50% of cases.

According to the literature, the leading role in the etiopathogenesis of HPE is assigned to excessive estrogen stimulation combined with progesterone deficiency [1,2], hormone-independent proliferation [3,6], inflammation [17], reduced apoptosis [4,7], pathological neo-angiogenesis [7], and also immune disorders in the endometrium [3, 7]. The key links in the implementation of the cascade of these mechanisms are the processes of interaction of a wide spectrum cytokines: tumor necrosis factor, chemokines, interferons, growth factors etc.[1, 8].

In recent times, great meaning has been attached to the processes of apoptosis, which plays a leading role in the functioning of the female reproductive system [6,8]; bcl-2 is a leading gene that determines the mechanism of cell death by inhibiting apoptosis [6]. During the menstrual cycle, the death of endometrial cells by apoptosis and their regeneration occur in a strictly regulated sequence and depend on the stage of the cycle. There is an opinion that disorder of apoptosis processes has fundamental meaning in the development of hyperproliferative processes and regeneration of cancer cells. Identification of markers of the disorder of programmed cell death at the stage of endometrial hyperplasia makes it possible to timely predict the course of the disease and choose the optimal individual treatment tactics aimed at maintaining and restoring generative function in women of reproductive age and preventing malignancy.

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