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РЕДАКЦІЙНА КОЛЕГІЯ

РЕДАКЦІЙНА РАДА

SECTION OF CLINICAL MEDICINE №2 (PEDIATRICS, OBSTETRICS AND GYNECOLOGY, NEONATOLOGY, INFECTIOUS DISEASES, PHTHISIOLOGY)
СЕКЦІЯ КЛІНІЧНОЇ МЕДИЦИНИ №2 (ПЕДІАТРІЯ, АКУШЕРСТВО ТА ГІНЕКОЛОГІЯ, НЕОНАТОЛОГІЯ, ІНФЕКЦІЙНІ ХВОРОБИ, ФТИЗІАТРІЯ)

DIAGNOSTIC ALGORITHM FOR BENIGN ENDO- AND MYOMETRIUM PATHOLOGY IN WOMEN OF REPRODUCTIVE AGE

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Relevance: the prevalence of endometriosis is increasing in gynecological morbidity. Adenomyosis, comprising 53–80% of endometriosis cases, manifests with menstrual disturbances, pain, anemia, and dysfunction of vital organs and systems. Various treatment approaches exist, but a unified management algorithm is lacking.

Aim: to optimize the diagnostic algorithm of adenomyosis in reproductive-age women by using clinical, biochemical, and immunological methods.

Materials and methods: clinical and laboratory methods, including hemoglobin level, biochemical, and immunological analyses, were conducted on 135 reproductive-age women with benign uterine pathology (study group). Among them, 45 women had adenomyosis (A), 45 had endometrial hyperplasia (EH), and 45 had combined uterine pathology (A + EH). The control group comprised 30 gynecologically healthy women.

Results: women with excessive menstrual bleeding due to benign uterine pathology experienced decreased hemoglobin levels. In the study group, 67.4% had hemoglobin below 110 g/l. Group A had hemoglobin level 109.4±2.6 g/l, group EH – 106.8±1.7 g/l, and group A+EH – 103.1±2.1 g/l. The control group had normal hemoglobin levels. 85.1% of women from the study group had serum ferritin below 9.0 ng/ml, and 80.1% had serum iron below 9.5 mmol, with no significant differences across study groups. The control group had normal levels of these indicators.

Women were tested for tumor markers CA-125, REA, and CA-19-9. CA-125 concentration in A+HPE group was significantly higher ($p<0.05$) than in groups A and HPE. No significant differences in REA and CA-19-9 levels were observed among study groups and the control group. Average levels of total cholesterol, triglycerides, and atherogenicity coefficient were determined, with no significant differences across study groups.

Follicle-stimulating hormone, luteinizing hormone, prolactin (PRL), estradiol, and progesterone levels were measured to assess the hypothalamic-pituitary-ovarian system. The average PRL level in the study group was 256.5±110 mIU/ml. The highest estradiol value was in the HPE group (71.4±57.6 pg/ml). Progesterone levels during the secretory phase of the menstrual cycle were the lowest in the A+HPE group.

Conclusions: hyperpolymenorrhea in benign uterine pathology led to significant anemia and total iron reserves depletion. CA-125 levels in patients with adenomyosis exceeded the indicators of the control group. Diagnostics of pituitary gland and ovarian hormonal function contribute to the selection of hormone therapy in women of reproductive age with benign uterine pathology.

Keywords: adenomyosis, Endometrial Hyperplasia, Hemoglobin, Ferritin, CA 125 antigen, Gonadal Steroid Hormones.

REVIEW OF THE GLOBAL HIV: PROGRESS, CHALLENGES, AND THE PATH TO ACHIEVING THE 95-95-95 GOALS

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Relevance: the relevance of this research lies in understanding the current state of the global HIV epidemic, including the number of people living with HIV, progress towards the 95-95-95 goals, HIV incidence, and HIV-related mortality. This information is crucial for policymakers, healthcare providers, and organizations working in HIV prevention and treatment to assess the effectiveness of existing interventions and identify areas for improvement.

Aim: the aim of this research is to provide an overview of the global HIV epidemic by examining key indicators such as the number of people living with HIV, progress towards the 95-95-95 goals, HIV incidence, and HIV-related mortality. The research seeks to shed light on the gaps and challenges in achieving the targets set forth by the 95-95-95 goals and to emphasize the ongoing importance of HIV prevention, testing, treatment, and care.

Materials and Methods: the data for this research was collected from various sources, including global HIV surveillance programs, epidemiological studies, and official reports from international organizations such as the Joint United Nations Programme on HIV/AIDS (UNAIDS). The methods involved in data collection and analysis include systematic data gathering, statistical modeling, and data synthesis to provide a comprehensive overview of the global HIV epidemic.

Results: the results of this research indicate that as of the end of 2022, approximately 39.0 million people were living with HIV globally, including 1.5 million children. Progress towards the 95-95-95 goals shows that there is a need to increase awareness of HIV status among an additional 3.5 million individuals, provide antiretroviral therapy to 2.1 million more people, and achieve viral load suppression in an additional 570,000 individuals.

Looking ahead to the goal of the 95-95-95 regime by 2025, significant efforts and accelerated progress are required. It is estimated that an additional 8.5 million individuals need to be aware of their HIV status, 4.9 million more people need to receive antiretroviral therapy, and viral load suppression needs to be achieved in an additional 1.3 million individuals to reach the targets by 2025.

Conclusions: the research highlights challenges in achieving the 95-95-95 goals and addressing the global HIV epidemic. Efforts are needed to improve testing rates, increase access to antiretroviral therapy, and enhance viral load suppression for reduced transmission and better health outcomes. Commitment, resources, and collaboration are necessary to reduce HIV incidence, improve testing and treatment access, and save lives.

Military conflicts pose additional barriers to the 95-95-95 goals. In conflict-affected regions like Ukraine, healthcare services for HIV prevention, testing, and treatment may be disrupted. Displacement, infrastructure destruction, and healthcare system breakdown impede progress. Addressing conflict's impact on HIV response requires humanitarian efforts, strengthening healthcare systems, ensuring access to essential services, and supporting affected individuals and communities.

Keywords: HIV, global, prevalence, incidence, testing, treatment, viral load suppression, 95-95-95 goals, antiretroviral therapy, mortality.

PREVALENCE OF RETINOPATHIES OF PREMATURE BABIES IN ODESSA REGION

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Relevance. Retinopathy of prematurity (vasoproliferative retinopathy, (ROP)) is a severe vitreoretinal eye disease that occurs mainly in deeply premature, immature children. First described by T. Terru (1942), as a separate nosological form, due to prematurity. Among preterm infants, ROP develops from 9% to 46.9%, and 69-90% of deeply preterm infants with birth weight less than 1000 g suffer from it. For today, PH occupies one of the main places in the structure of childhood vision disability and remains one of the most pressing problems in neonatology.

Aim: determination of the prevalence of ROP among premature babies of Odessa region depending on body weight at birth.

Materials and methods: a retrospective analysis of 648 medical histories of premature infants with a gestation period of 26-32 weeks, body weight 800-2000, who were treated in the department during 2021-2023, was conducted. The studies were conducted on the basis of the intensive care unit for newborns and premature babies of the MNE "ORCHCH" ORC, Odessa.

Results: in 2021, 70.00% of infants were low body weight (LBW) among 204 preterm children under treatment in the ORCHCH; 23.00% very low body weight (VLBW); 7.00% with extremely low body weight (ELBW). In 2022 - 226 children: 72.00% - with LBW; 18.00% - from VLBW; 10.00% - from ELBW. In 2023 - 247 children: 66, 00% - with LBW; 29.00% - from VLBW; 5.00% - from ELBW. The diagnosis of ROP was established in 78 premature infants, of which: in 2021 - in 27 (13.23%) children; in 2022 - in 24 (10.16%); in 2023 - in 21 (8.50%). Surgery was performed in 19 premature infants: in 2021 - in 6 children: 1 (16.66%) - with LBW, 4 (66.66%) - with VLBW, 1 (16.66%) - with ELBW; in 2022 - in 8 children: 1 (12.50%) - with LBW, 1 (12.50%) - with VLBW, 6 (75.00%) - with ELBW; in 2023 - in 5 children: 1 (20.00%) - with LBW, 1 (20.00%) - with VLBW, 39 (60.00%) - with ELBW.