

endometriosis during a year most symptoms of menstrual cycle disorders have disappeared in 90% cases.

Conclusion. Endometriosis is a gynecological pathology that can be the reason of menstrual cycle disorders. In time endometriosis has a lot of other complications. One of them is infertility. So to save reproductive health is very important to normalize menstrual cycle, to treat endometriosis and to prevent infertility.

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THE MAIN PRINCIPLES OF DIAGNOSTICS OF INFERTILITY

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Background. Infertility, defined as the failure to achieve pregnancy after 12 months or more of regular unprotected sexual intercourse, affects an estimated 17,5% of the global adult population. It represents a complex condition with biomedical, psychological, and social implications. According to WHO's 2023 global report, infertility prevalence is similar across high-, middle-, and low-income countries, emphasizing that it is a universal challenge rather than a disease of affluence. Over the past decade, increasing environmental pollution, delayed age of marriage and conception, and lifestyle changes have contributed significantly to the rise in infertility rates [1].

Globally, female factor infertility accounts for approximately 40-50% of cases, male factor infertility for 30–40%, and combined or unexplained causes for the remainder. Common female causes include ovulatory disorders, tubal damage, and endometriosis. Male causes are often related to oligospermia, varicocele, or endocrine abnormalities. Lifestyle factors such as obesity, smoking, alcohol use, and stress have been repeatedly associated with reduced fertility outcomes. Environmental exposures, including pesticides, heavy metals, and endocrine-disrupting chemicals, have also emerged as significant contributors. Socioeconomic disparities continue to influence

access to diagnosis and fertility treatment. The cost of assisted reproduction remains prohibitively high in low- and middle-income nations [2].

Ovulatory defects are present in 40% of infertile women and in approximately 15% of couples with infertility. Often a defect in ovulatory function manifests itself in menstrual disturbances and can be identified by history in the majority of women. A patient with menstrual abnormalities should be investigated for underlying causes such as polycystic ovarian syndrome, thyroid disease, hyperprolactinemia, and hypothalamic causes secondary to weight changes. Eumenorrhea – normal menstrual cycles by history – is a highly accurate marker of ovulation and anovulatory levels of serum progesterone (< 3 ng/mL) are found in only a very small minority of eumenorrheic patients. In addition to a thorough menstrual history, other methods used to evaluate ovulation include basal body temperature (BBT) recordings, urinary luteinizing hormone (LH) ovulation predictor kits, mid luteal serum progesterone testing, and endometrial biopsy to assess for secretory endometrial development. Although BBT recordings are the least costly tool in a reliable patient, they are difficult to interpret and often frustrating for the patient. Another test added to the workup of couples with infertility includes assessment of ovarian reserve. Women with advanced age or history of prior ovarian surgery are at risk for diminished ovarian function or reserve. Given the relatively noninvasive nature of the testing, several practitioners are including the evaluation of ovarian reserve as first-line workup for infertility. The testing includes a cycle day 3 serum follicle-stimulating hormone (FSH) and estradiol level, clomiphene citrate challenge test, and/or an ultrasonographic ovarian antral follicle count. The results of these tests are not absolute indicators of infertility but abnormal levels correlate with decreased response to ovulation induction medications and lowered live birth rates after IVF [1].

Assessment of the uterine contour and the tubal patency is an integral part of the basic infertility evaluation. This may be achieved by hysterosalpingography (HSG). An HSG consists of radiographic evaluation of the uterine cavity and fallopian tubes after injection of a radio-opaque medium through the cervical canal. Along with laparoscopic dye pertubation, it can best assess tubal patency: the concordance of HSG with laparoscopic dye pertubation is estimated as close to 90%. However, patent fallopian tubes on HSG do not confirm that ovum pickup will occur. For example, women with severe endometriosis may have adherent ovaries in the culde sac with normal fallopian tubes [2].

The aim of the study – to examine patients with infertility.

Research methods. Studying history cases of the patients with infertility, analysis results, gynecological and extragenital pathology, statistic methods.

Results and discussion. We have examined 340 women with infertility. The average age was about 33 years. In 92% cases patients suffered from extragenital pathology: thyroid diseases (34%), respiratory problems (64%), cardiovascular diseases (28%). All the patients indicated some symptoms before beginning of the periods: abdominal cramps (100%), mood swings (100%), tender breast (81.13%), abnormal vaginal discharge (71,69%), acne (58,49%), backache (45,28%). During diagnostic laparoscopy the women were randomly assigned to undergo resection or

ablation of visible endometriosis or diagnostic laparoscopy only. They were followed for 36 weeks after the laparoscopy or, for those who became pregnant during that interval, for up to 20 weeks of pregnancy. In the intervention group, 50 of the 170 women became pregnant in the follow-up period, compared with only 29 of 169 in the diagnostic laparoscopy group.

Conclusion. Infertility is a gynecological pathology that can be the complication of different diseases and disorders. So to save reproductive health is very important to normalize menstrual cycle, to treat all extragenital and gynecological diseases and to prevent infertility.

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THE MAIN FEATURES AND INDICATIONS FOR PLATELET TRANSFUSION IN CHILDREN

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Background. Platelets play a crucial role in the primary hemostatic process, and their deficiency or dysfunction can lead to an increased risk of bleeding. In children, thrombocytopenia can occur due to a variety of conditions, including infections, autoimmune disorders, cancer, and congenital abnormalities. Platelet transfusion is an essential part of treatment for stopping or preventing bleeding, and it is widely used in clinical practice, especially for children.

Platelet mass is a concentrated form of platelets derived from a single donor's whole blood, containing a high number of these cells that help normalize blood clotting and maintain hemostasis. [1] However, platelet transfusions in children require careful consideration of indications, protocols, and potential risks, as recommended by the American Society of Hematology, which only recommends transfusions for life-threatening bleeding or prior to surgery [2].

The aim of the study – to consider the main features and indications for platelet transfusion depending on the children gender and age.