



OBSTETRIC BLEEDING: MODERN APPROACHES TO DIAGNOSIS, PREVENTION AND TREATMENT

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ABSTRACT

Obstetric bleeding remains one of the leading causes of maternal mortality worldwide. The article examines the main causes of obstetric bleeding, its pathophysiology, modern methods of diagnosis and prevention, as well as the most effective approaches to treatment. Particular attention is paid to obstetric bleeding in the context of developing and developed countries, as well as a multidisciplinary approach to the management of such complications.

Aim of the research: to analyze literature data to gain an understanding of the main causes of obstetric hemorrhage as an unsurmountable threat to maternal health and life, and modern approaches to its prevention.

Introduction. Obstetric hemorrhage is divided into bleeding in the first half of pregnancy (including miscarriage, ectopic pregnancy, and chorioepithelioma) and in the second half of pregnancy (mainly associated with placenta previa, premature detachment of a normally located placenta, and uterine rupture). Of primary importance for clinical practice are also postpartum hemorrhage, which is divided into early and late.

According to the World Health Organization (WHO), postpartum hemorrhage (PPH) accounts for about 25% of maternal mortality, especially in countries with low levels of health care. Timely diagnosis, proper labor management, and blood loss prevention play a key role in improving outcomes.

Obstetric hemorrhage remains one of the most important causes of maternal mortality all over the world. Every year, more than 529 thousand women die from complications of pregnancy. In 25% of deaths are caused by bleeding. The scale of the problem is astounding: every day, women die from obstetric hemorrhage. More than 99% of deaths from hemorrhagic complications associated with pregnancy occur in developing countries. According to William Farr (2007), 22% of maternal deaths in the world are associated with bleeding. "Obstetric hemorrhage is one of the leading causes of maternal mortality, which in most cases is preventable ..." [1]. One of the main factors increasing the percentage of obstetric hemorrhage is the increase in the number of abdominal deliveries [4-6]. On average, over the past decade, this figure has reached 25%, and in some regions up to 27.9% [6,7]. The high frequency of cesarean sections is due to new demographic and social characteristics of modern society, which opposes the cult of motherhood and family to personal and career growth of women, as a result of which the number of women who decide to have children after 35 years of age is growing, when, due to physiological reasons, as well as acquired health

problems, pregnancy proceeds pathologically, leading to a justified increase in abdominal delivery. In addition, the demand for assisted reproductive technologies is growing, and in this complex, from the point of view of the formation of the "dominant of childbirth", group of pregnant women, the refusal of natural childbirth in order to get a "guaranteed" child is widespread. Prevention of postpartum hemorrhage consists in refusing unjustified induction and stimulation of labor, unjustified amniotomy, prohibited benefits and performing cesarean section only for strict indications.

Etiology and classification. Obstetric hemorrhages are caused by many factors that can be divided into anatomical, functional and mechanical. The most common causes of bleeding:

1. Bleeding in the first half of pregnancy:

- Spontaneous abortion.
- Ectopic pregnancy.
- Hydatidiform mole.

2. Bleeding in the second half of pregnancy:

- Placenta previa.
- Premature detachment of a normally located placenta.
- Uterine rupture.

3. Postpartum hemorrhage:

- Uterine atony (the main cause).
- Birth canal trauma.
- Placental tissue remnants.
- Coagulopathy.

The key point in the diagnosis of obstetric bleeding is a combination of clinical assessment and instrumental methods. The main stages of diagnosis:

1. Clinical assessment:

- Determination of the volume of blood loss.
- Assessment of the hemodynamic status (blood pressure, heart rate).
- Examination of the birth canal and uterus.

2. Instrumental methods:

- Ultrasound examination (US): to diagnose placenta previa, placental abruption or residual placental tissue.
- Laboratory tests: assessment of hemoglobin levels, platelets, coagulogram.

3. Assessment of risk factors:

- History of premature birth, cesarean section or placenta previa.
- Presence of hypertensive disorders during pregnancy.

Preventive measures are based on early identification of risk groups and active surveillance of patients. Key approaches include:

1. Antenatal management:

- Screening for placenta previa using ultrasound.
- Correction of anemia in pregnant women.
- Counseling about risk factors (e.g. multiple pregnancy, advanced maternal age).

2. Prevention of PPH:

- Routine use of uterotonics after delivery (e.g. oxytocin).
- Monitoring for placenta delivery and careful uterine inspection.

Treatment of obstetric hemorrhage is based on three principles: restoring circulating blood volume, eliminating the cause of bleeding, and preventing complications.

1. Drug therapy:

- Uterotonics (oxytocin, methylergometrine).
- Antifibrinolytics (tranexamic acid).
- Blood products (packed red blood cells, fresh frozen plasma).

2. Surgical treatment:

- Uterine tamponade (e.g. balloon).
- Laparotomy to repair placental ruptures or detachment.
- Hysterectomy if other methods are ineffective. 3. Innovative approaches:
- Use of interventional techniques such as uterine artery embolization.
- Improved hemostasis technologies (eg, B-lynch suture).

Conclusion. Obstetric hemorrhage is a serious complication requiring a multidisciplinary approach.

Timely diagnosis, prevention, and adequate treatment can significantly reduce maternal mortality. An important area for future research remains the development of more effective methods of prevention and treatment, especially in resource-limited settings.

Thus, it should be noted that the modern features of obstetric hemorrhage risk factors are that the following trends are increasingly observed: the frequency of bleeding associated with preeclampsia, HELLP syndrome, premature placental abruption, placenta previa, fetal loss syndromes with hematogenous thrombophilia increases, this indicates a relationship between disorders of the trophoblast invasion process and placentation with hereditary and acquired forms of hemostasis disorders.

References:

1. Всемирная организация здравоохранения. Руководство по профилактике и лечению послеродовых кровотечений. Женева, 2022.
2. Cunningham F., Leveno K., Bloom S. Williams Obstetrics. 26th edition. McGraw-Hill, 2022.
3. Айламазян Э.К., Репина М.А., Кузьминых Т.У. Акушерские кровотечения: профилактика и лечение//Акушерство и гинекология. - 2009. - № 3. - С. 15-20.
4. Акушерские кровотечения: пособие для врачей/ Репина М.А., Кузьминых Т.У., Зайкулина М.С. и др./Под ред. Э. К. Айламазяна. - СПб.: Изд-во Н-Л, 2009. - 60 с.
6. Shopulotova Z., Kobilova Z., Shopulotov S. INFLUENCE OF PREECLAMPSIA ON SOMATIC DISEASES //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 778-780.
7. Kh K. Z., Kh Z. Z. FEATURES OF HEART RHYTHM DISORDERS AT DIFFERENT STAGES OF GESTATION //Talqin va tadqiqotlar ilmiy-uslubiy jurnali. – 2024. – Т. 2. – №. 54. – С. 272-277.
8. Khudoyarova D. R., Kh K. Z., Kh Z. Z. ARRHYTHMIAS IN PREGNANCY: TACTICS OF PATIENT MANAGEMENT //Eurasian Journal of Medical and Natural Sciences. – 2024. – Т. 4. – №. 9. – С. 119-123.
9. Shopulotova Z., Shopulotov S., Kobilova Z. MODERN VIEWS ON THE EFFECTIVENESS OF OZONE THERAPY //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 781-786.
10. Shopulotova Z., Kobilova Z., Bazarova F. TREATMENT OF COMPLICATED GESTATIONAL PYELONEPHRITIS IN PREGNANTS //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 630-634.
11. Bonnar J. Massive obstetric haemorrhage //Best Practice & Research Clinical Obstetrics & Gynaecology. – 2000. – Т. 14. – №. 1. – С. 1-18
12. Shopulotova Z., Kobilova Z., Shopulotov S. NEW OPPORTUNITIES FOR THE TREATMENT OF HYPERACTIVE BLADDER SYNDROME //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 770-773.
13. Shopulotova Z., Kobilova Z., Shopulotov S. URINATION DISORDERS IN PREGNANT WOMEN //Science and innovation. – 2023. – Т. 2. – №. D12. – С. 774-777.
14. Ibragimov S. et al. UNVEILING EMOTIONS: A COMPREHENSIVE EXPLORATION OF ANALYZING, UNDERSTANDING, AND MANAGING EMOTIONAL RESPONSES //Collection of scientific papers «ΛΟΓΟΣ». – 2023. – №. November 24, 2023; Seoul, South Korea. – С. 228-230.
15. Khamzaevna Z. Z. ROLE OF BETA-BLOCKERS IN THE TREATMENT OF ARTERIAL HYPERTENSION Zubaydilloeva Zarina Khamzaevna //Independent Publishing Network Ltd Mailing address–MB# 1869, PO BOX 229, EGHAM, TW20 8WZ, UK. – 2020. – С. 20.