

**PLAN OF LESSONS IN OBSTETRICS AND GYNECOLOGY  
FOR 6th YEAR STUDENTS OF  
FACILITY FOR INTERNATIONAL STUDENTS**

**Topic 1. Physiological pregnancy. Preparing the organism for childbirth**

1. Diagnosis of pregnancy. Estimation of gestational age and prediction of expected date of delivery. Estimation of fetal weight
2. Methods of obstetrical examination.
3. Physiological changes during pregnancy. Changes in the nervous, endocrine, cardiovascular, urinary, gastrointestinal and other systems of the body. Placental function.
4. Planning of pregnancy, preconceptional counseling and care. Management of physiological pregnancy.
5. Perinatology. Perinatal period. Groups and risk factors of perinatal pathology.
6. Modern methods for assessing the fetal wellbeing: ante- and intrapartum cardiotocography, ultrasound, Doppler blood flow study, biophysical profile, determination of the gas composition of the blood of the fetus.
7. Indications for prenatal diagnosis. Methods of prenatal diagnosis: amniocentesis, cordocentesis, chorionic villus biopsy, biochemical and hormonal methods for examining maternal blood. Medical genetic counseling.
8. Ethics and deontology in obstetrics.

**Topic 2. Physiological labor**

1. The causes for the onset of labor. Parturition, preliminary period.
2. Duration of labor. Periods of labor.
3. The first stage of labor. The clinical course, management. Labor analgesia. Indications. Methods. Medications.
4. The second stage of labor. The clinical course, management. Biomechanism of labor.
5. The clinical course and management third stage of labor. Early postpartum period. Mechanisms of the postpartum hemostasis. Physiological and pathological blood loss.
6. Assessment of the condition of the newborn in the delivery room. Care for the newborn.
7. Labor analgesia: modern methods Indications. Methods. Medications and their effects on the fetus and newborn.

**Topic 3. Pregnancy and extragenital diseases.**

1. The clinical course of pregnancy in heart diseases. Contraindications for pregnancy. Management of pregnancy and labor. Rehabilitation in the postpartum period.

2. Pregnancy and anemia: etiology, pathogenesis, clinics, diagnostics, treatment, prophylaxis.
3. Clinical course of pregnancy in diabetes. Contraindications for pregnancy. Management of pregnancy and labor. Pathology of fetus and newborn. Rehabilitation of patients with diabetes in the postpartum period.
4. Clinical course of pregnancy in kidney diseases. Contraindications for pregnancy in urinary system diseases. Management of pregnancy and labor. Rehabilitation of patients with kidney diseases in the postpartum period.
5. Pyelonephritis in pregnancy: etiology, clinical course, diagnosis, treatment, prophylactic, rehabilitation.
6. Clinical course of pregnancy in liver diseases. Contraindications for pregnancy. Protocol of diagnostics and treatment in pregnancy, features of delivery and management in postpartum period.
7. HIV-infection and pregnancy. Mechanisms of mother-to-child transmission of HIV. Prophylaxis of perinatal transmission of HIV.
8. Clinical course and management of pregnancy, labor and postpartum period in acute surgical pathology. Complications for mother and child, its prophylactic.
9. Clinical course and management of pregnancy, labor and postpartum period in related gynecological pathology. Tactics in complications, type of surgery. Complications for mother and child, its prophylactic.

#### **Topic 4. Hypertensive disorders and pregnancy**

1. Classification of hypertensive disorders during pregnancy. Pathogenesis of preeclampsia (PE).
2. The main clinical types of PE. Criteria for severe preeclampsia. Complications for mother and child. Causes of maternal and perinatal mortality.
3. Protocol of examination and treatment of patients with preeclampsia.
4. Differential diagnosis of hypertensive disorders in pregnant women.
5. Therapy of preeclampsia. Indications for preterm delivery. Management of labor.
6. Eclampsia: clinical picture, diagnosis, emergency care, obstetric tactics.
7. HELLP-syndrome. Pathogenesis, clinical picture, diagnosis, obstetric tactics.
8. Rehabilitation in patients with hypertensive disorders. Antenatal counseling and care.

#### **Topic 5. Obstetric bleeding**

1. Causes of obstetric bleeding during pregnancy, delivery, postpartum period.
2. Placenta previa: causes, clinical features, diagnosis, differential diagnosis. Complications. Management.
3. Abruptio placentae: causes, clinical features, diagnosis, differential diagnosis. Complications. Management.
4. Causes and management of third stage bleeding: placenta accreta, retained placenta. Manual removal of placenta.

5. Postpartum hemorrhage. Causes of bleeding. Protocol of examination and treatment. Conservative and surgical methods of hemostasis.
6. Injuries to the birth canal, obstetric hematomas: causes, clinical features, diagnosis, treatment.
7. Uterine rupture: causes, clinical manifestations, differential diagnosis, management.
8. Hemorrhagic shock in obstetrics: pathogenesis, clinical features, principles of diagnosis and treatment.
9. DIC-syndrome in obstetrics: risk factors, pathogenesis, clinical features, principles of diagnosis and treatment.

### **Topic 6. Miscarriage and post-term pregnancy**

1. Miscarriage. Etiology, pathogenesis. Diagnosis and treatment of clinical stages of spontaneous abortion.
2. Cervical insufficiency: causes, diagnosis, methods of correction, management of pregnancy and labor.
3. Preterm labor. Causes. Clinical manifestations. Diagnosis. Complications. Management.
4. Tocolysis, prevention of fetal and newborn RDS.
5. Prelabor Rupture of the membranes (PROM). Causes. Clinical manifestations. Diagnosis. Complications. Management.
6. Post-term pregnancy. Causes. Clinical manifestations. Diagnosis. Complications. Management.
7. Induced labor. Indications. Methods of pre-induction and induction of labor activity.

### **Topic 7. Anatomical and clinically contracted pelvis. Abnormal uterine action**

1. Anatomically contracted pelvis. Definition, etiology. Classification.
2. Diagnostics. Course and management of pregnancy and childbirth.
3. Cephalopelvic disproportion: definition, causes, diagnosis, obstetrical tactics. Complications for mother and fetus.
4. Shoulder dystocia: definition, causes, diagnosis, obstetrical tactics. Complications for mother and fetus.
5. Abnormal uterine action: causes, classification.
6. Uterine inertia causes, diagnosis, obstetrical tactics.
7. Generalized tonic contraction causes, diagnosis, obstetrical tactics.
8. Incoordinate uterine action: spastic lower segment, constriction ring, cervical dystocia. causes, diagnosis, obstetrical tactics.

### **Topic 8. Malposition malpresentation, multiple pregnancy. Placental insufficiency. Hemolytic disease of the fetus and newborn**

1. Breech presentation. Etiology. Classification. Diagnosis.
2. Course and management of pregnancy in breech presentation
3. The clinical course of labor with breech presentation. Biomechanism of birth.
4. Management of labor in the breech presentation. Assistance in labor (Tsovyanov manual, classical hand assistance).
5. Complications for mother and fetus in breech presentation.
6. Malpresentation of fetus. Course and management of pregnancy External-internal classic (combined) rotation of the fetus. Indications, conditions, complications.
7. Total breech extraction (extraction of fetus therefor the pelvis). Indications. Conditions
8. Extension presentations of fetus. Brow, facial presentation. Biomechanism of birth. Obstetric management.
9. Multiple pregnancy. Etiology. Classification. Diagnosis. Course and management of multiple pregnancy.
10. Complications for mother and fetus. Course and management of labor in multiple pregnancies. Complications for mother and fetus. Prevention of perinatal losses.

### **Topic 9. Obstetric surgery**

1. Cesarean section (CS). Indications during pregnancy and labor.
2. Examination of pregnant women before the operation of CS. Preoperative care. Anesthesia for CS: methods, medications, complications.
3. Methods of CS. Main stages of abdominal CS in lower uterine segment.
4. Intra- and postoperative complications of CS
5. Postoperative care. Prevention of complications of CS. Pregnancy after CS.
6. Obstetrical forceps: indications, conditions and contraindications for forceps. Methods of anesthesia. Technique of forceps. Early and long-term complications of forceps for the mother and fetus.
7. Vacuum extraction of fetus: techniques, conditions, indications and contraindications, complications.
8. Destructive operations: types of operations, indications, conditions. Methods of analgesia, complications.

### **Topic 10. Physiology and pathology of the postpartum period**

1. The course and management of the physiological puerperium. Involution of the uterus and other pelvic structures. General physiological changes. Menstruation and ovulation. Lactation.
2. Management of normal puerperium.
3. Etiopathogenesis of septic diseases in the puerperium. Predisposing factors for the development of infectious complications.

4. Clinical forms of stage I (postpartum ulcer, endometritis). Clinical manifestations. Diagnosis. Complications. Management.
5. Clinical forms of stage II (metroendometritis, salpingooforitis, parametritis, thrombophlebitis of the pelvic veins and veins of the hips, shins, pelvioperitonitis). Clinical manifestations. Diagnosis. Complications. Management.
6. Clinical forms of stage III (progressive thrombophlebitis, peritonitis). Clinical manifestations. Diagnosis. Complications. Management.
7. Clinical forms of stage IV (sepsis, septic shock). Clinical manifestations. Diagnosis. Complications. Management.
8. Principles of rational antibiotic therapy in patients with infectious and inflammatory complications during pregnancy, labor and the postpartum period.

### **Topic 11. Pediatric gynecology**

1. Organization of gynecological care for girls and adolescents in the Republic of Belarus.
2. Inflammatory diseases of the genitals in childhood and adolescence. Etiopathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment.
3. Abnormal uterine bleeding of the juvenile period. Etiopathogenesis. Clinical picture, diagnostics, differential diagnostics. Methods of hemostasis. Relapse prevention.
4. Dysmenorrhea in girls. Etiopathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment. Prevention.
5. Precocious puberty. Etiopathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment.
6. Delayed puberty. Etiopathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment.
7. Abnormalities of the genitals. Etiology. Clinical picture, diagnosis, treatment.
8. Tumors and tumor-like diseases of the ovaries in children and adolescents. Etiology. Pathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment.
9. Genital injuries in girls. Clinical picture, diagnostics, differential diagnostics. Treatment.

### **Topic 12. Inflammatory diseases of the reproductive system**

1. Microflora of the genital tract in different age periods of women: the concept of normocenosis and dysbiosis.
2. Protection factors of the reproductive tract from pathogenic organisms.
3. Methods of assessment of biocenosis of the vagina.
4. Inflammatory diseases of female genitals of non-specific etiology: classification, etiology, pathogenesis, clinical picture, diagnostic methods. Basic principles of conservative treatment, indications for surgical treatment. Prognosis for reproductive health.

5. Sexually transmitted infections. Etiology, pathogenesis. Clinical picture. Diagnostic method. Etiotropic and pathogenetic therapy. Features of diseases and their treatment in pregnant women.
6. Inflammatory diseases of the female genital organs of specific etiology: gonorrhea, syphilis, tuberculosis. Etiopathogenesis. Clinical picture. Principles of diagnosis and treatment.

### **Topic 13. Normal menstrual cycle and its neurohumoral regulation. Menstrual disorders**

1. Anatomical and physiological features of the female reproductive system in different age periods.
2. Menstrual cycle. Neurohumoral regulation of female reproductive function.
3. Amenorrhea. Classification. Etiology. Pathogenesis.
4. Diagnosis, differential diagnosis, principles of treatment of amenorrhea.
5. Abnormal uterine bleeding. The PALM-COEIN classification system of causes.
6. Methods of medical and surgical hemostasis of abnormal uterine bleeding.
7. Anti-relapse treatment of AMC. Rehabilitation.
8. Dysmenorrhea. Etiology, pathogenesis, clinical picture, diagnosis, treatment, prevention.

### **Topic 14. Neuroendocrine syndromes in gynecology**

1. Neuroendocrine syndromes: definition, classification.
2. Polycystic ovary syndrome. Etiology, pathogenesis, classification, clinical picture, diagnosis, differential diagnosis, treatment.
3. Congenital dysfunction of the adrenal cortex. Etiology, pathogenesis, classification, clinical picture diagnosis, differential diagnosis, treatment.
4. Hyperprolactinemia. Etiology, pathogenesis, classification, clinical picture, diagnosis, differential diagnosis, treatment.
5. Premenstrual syndrome. Etiology, pathogenesis, classification, clinical picture diagnosis, differential diagnosis, treatment.
6. Climacteric syndrome. Etiology, pathogenesis, classification, clinical picture differential diagnosis, treatment. Indications for hormone replacement therapy.
7. Sheehan's Syndrome. Etiology, pathogenesis, classification, clinical picture, diagnosis, treatment.

### **Topic 15. Hyperproliferative and hormone-dependent diseases of the female genital organs. Endometriosis**

1. Background diseases of the cervix. Classification, clinical picture, diagnosis, treatment, prevention.
2. Cervical dysplasia. Etiopathogenesis, clinical picture, diagnosis, treatment, prevention.
3. Endometrial hyperplastic processes: etiopathogenesis, classification, clinical picture, diagnosis, differential diagnosis, main directions in treatment.

4. Endometriosis: definition, etiopathogenesis, clinical picture. Diagnosis of various forms of endometriosis, the main directions in the treatment and rehabilitation.
5. Uterine fibroids: etiopathogenesis, classification, clinical picture, diagnosis, differential diagnosis, the main directions of organ-preserving and radical treatment.
6. Ovarian tumors: etiology, pathogenesis, classification principles, clinical picture, volume of diagnostic studies, main directions of treatment.
7. Dishormonal diseases of the mammary glands. Etiology, pathogenesis, clinical picture, diagnosis, treatment, prevention

### **Topic 16. Emergency medical care in gynecology**

1. Ectopic pregnancy. Etiopathogenesis, classification, clinical picture, diagnosis, treatment, prevention. Rehabilitation.
2. Apoplexy of the ovaries. Etiology, pathogenesis, clinical picture, diagnosis, treatment. Rehabilitation.
3. Twisting the leg of the ovarian tumor. Etiopathogenesis, clinical picture, diagnosis, treatment, prevention.
4. Incomplete spontaneous abortion. Clinical picture, diagnosis, treatment.
5. Other conditions in gynecology that require emergency care (abnormal uterine bleeding, trauma of the external genitals, perforation of the uterine wall during intrauterine manipulations, a submucous node, necrosis of the myomatous node, rupture of the ovarian cyst capsule).
6. Preparation for planned and emergency gynecological operations.
7. Complications after gynecological operations, its prevention. Management of the postoperative period in gynecological patients.