

**Topic scheme of practical studies  
on obstetrics and gynecology  
for the Medical Faculty for International Students  
2016-2017 year**

1. Normal pregnancy and prenatal care.
2. Normal labor and delivery.
3. Cardiovascular, endocrinologic and hematologic diseases in pregnancy.
4. Acute and chronic liver pathology, renal diseases in pregnancy.
5. Pulmonary diseases, pathology of eyes, diseases of the central and vegetative nervous system in pregnancy.
6. Gynecologic and acute surgical pathology in pregnancy, labor or postpartum period. Adolescent pregnancy and labor. Pregnancy and labor in late reproductive age.
7. Gestosis.
8. Obstetrical bleedings.
9. The abnormal puerperium.
10. Pediatric and adolescent gynecology.
11. Inflammatory diseases of the woman's reproductive system.
12. Gynecologic emergency.
13. Means and methods of contraception. Induced abortion in early and late terms of pregnancy.
14. Climacteric syndrome.
15. Benign and premalignant lesions of the female reproductive organs.

**Studies last 6,0 hours**

**8.00 – 13.00**

**Break time 1 – 09.30-09.45**

**Break time 2 – 11.15-11.30**

**PRAKTIKAL SKILLS**

**Heade of obstetrics and gynecology chair**

**Gutikova L.V.**



## **Lesson 1**

### **Normal pregnancy and prenatal care**

1. Changes in specific organ systems during pregnancy.
2. Placental anatomy and physiology.
3. Diagnosis of pregnancy. Estimation of the duration of pregnancy and the date of childbirth.
4. Initial routine examination of obstetric patient. The methods of obstetric examination. First-trimester examination.
5. Fetal sampling for prenatal diagnosis: amniocentesis, chorionic villus sampling, umbilical cord sampling, fetal scalp sampling, fetoscopy. Indications, contraindications and possible complications.
6. Fetal heart rate (FHR). Interpreting fetal heart rate tracings during pregnancy.
7. Criteria of normal and pathological FHR.
8. Ultrasound during pregnancy. Data obtained from ultrasound examination in first, second and third trimester. Ultrasound studies of the fetus.
9. Doppler ultrasound in fetal monitoring.
10. Assessment of fetal well-being (nonstress test, biophysical profile, contraction stress test).
11. Normal pregnancy events in first, second and third trimester. Prenatal care.
12. Perceptions before the onset of labor.
13. Bishop's scoring system for cervical assessment.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## **Lesson №2**

### **Normal labor and delivery**

1. Clinical course and management of first stage of labor.
2. Events in first stage of labor, effacement of cervix in primigravidae and
3. multiparae, actual factors responsible for first stage of labor (uterine activity, amniotic sac).
4. Vaginal examination in labor. Synclitism and asynclitism.
5. The methods of registration of uterine activity.
6. Obstetric anesthesia and analgesia. Use of local anesthetics.
7. The biomechanism of labor in vertex presentation- definition.
8. Biomechanism of normal labor in occipito-anterior position.
9. Biomechanism of normal labor in occipito-posterior position.
10. Stations of fetal head (in relation to the level of the ischial spines). Relation to plane of pelvis.
11. Assessment of fetus well-being during labor. Interpreting fetal heart rate tracings during first and second stage of labor.
12. Clinical course of second stage of labor ( condition of the patient, characteristic of activity of the basic systems in woman: respiratory
13. system, blood circulations and other).
14. Management of the second stage of labor.
15. The principles of the delivery of the head in the second stage of labor.
16. Clinical course and management of third stage of labor.
17. Concept about physiological and pathological blood loss during third stage of labor.
18. The signs of placental separation.
19. Ways of assist of expulsion the placenta.
20. Manual removal of the placenta.
21. Concept "afterbirth". Afterbirth examination.
22. The estimation of a condition of newborns according a scale of Apgar.
23. Clinical course and management of the early postpartum period (first 2 hours after delivery).

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## Lesson 3

### Cardiovascular, endocrinologic and hematologic diseases in pregnancy

1. Myocardium diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
2. Heart rhythm disorders. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
3. Diseases of the veins. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
4. Methods of obstetric anesthesia and analgesia at various diseases of cardiovascular system.
5. Pituitary diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
6. Diabetes mellitus. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
7. Thyroid diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
8. Diseases of the adrenal gland. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
9. Methods of obstetric anesthesia and analgesia at various diseases of endocrine system.
10. Acute and chronic anemia. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
11. Leukosis. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
12. Trombophilia. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
13. Thrombocytopenia. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
14. Methods of obstetric anesthesia and analgesia at various diseases of hematologic system.

#### Literature

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.-p.129-145, 226-234, 367-376, 383-391, 408-412, 427-435.

## **Lesson 4**

### **Acute and chronic liver pathology, renal diseases in pregnancy**

1. Acute and chronic liver diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
2. Methods of obstetric anesthesia and analgesia at various diseases of a liver.
3. Acute and chronic pyelonephritis. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
4. Glomerulonephritis. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
5. Urinary calculi. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
6. Cystitis and urethritis. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
7. Methods of obstetric anesthesia and analgesia at various renal diseases.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.-p. 129-145, 226-234, 379-383, 439-444.

## **Lesson 5**

### **Pulmonary diseases, pathology of eyes, diseases of the central and vegetative nervous system in pregnancy**

1. Acute and chronic upper respiratory tract diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
2. Pneumonia. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
3. Asthma. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.
4. Methods of obstetric anesthesia and analgesia at various pulmonary diseases.
5. Pathology of eyes. Features of a clinical course and management of pregnancy, labor and postpartum period (including situations after surgical treatment). Complications for mother and a fetus. Indications to pregnancy termination.
6. Methods of obstetric anesthesia and analgesia at pathology of eyes.
7. Pathology of the central and vegetative nervous system. Features of a clinical course and management of pregnancy, labor and postpartum period (including situations after surgical treatment). Complications for mother and a fetus. Indications to pregnancy termination.
8. Methods of obstetric anesthesia and analgesia at various diseases of the central and vegetative nervous system.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.-p. 129-145, 226-234, 376-379, 444-454.

## **Lesson 6**

### **Gynecologic and acute surgical pathology in pregnancy, labor or postpartum period**

#### **Adolescent pregnancy and labor**

#### **Pregnancy and labor in late reproductive age**

1. Pathology of external genitalia and vagina. Features of a clinical course and management of pregnancy, labor and postpartum period. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
2. Cervical pathology in pregnancy. Features of a clinical course and management of pregnancy, labor and postpartum period. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
3. Uterus diseases. Features of a clinical course and management of pregnancy, labor and postpartum period. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
4. Pathology of ovaries. Features of a clinical course and management of pregnancy, labor and postpartum period. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
5. Appendicitis. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
6. Pancreatitis. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
7. Cholecystitis. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
8. Gastric and duodenal ulcer disease. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
9. Intestinal obstruction. Tactics of emergency help. Complications for mother and a fetus. Indications to pregnancy termination.
10. Adolescent pregnancy and labor. Pregnancy and labor in late reproductive age. Features of a clinical course and management of pregnancy, labor and postpartum period. Complications for mother and a fetus. Indications to pregnancy termination.

#### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.-p. 435-439, 456-461, 911-912.

## **Lesson 7**

### **Gestosis**

1. Gestosis. Definition. Classification. Group of risk.
2. Etiopathogenesis of gestosis.
3. Early gestosis (hyperemesis gravidarum): vomiting. Classification. Clinic. Diagnostics. Treatment.
4. Gestosis (hypertensive disorders of pregnancy). Classification. Prediction and management.
5. Edema of pregnant women. Clinic. Diagnostics. Treatment.
6. Nephropathia of pregnant women. Classification. Diagnostics. Treatment. Management of pregnancy and labor.
7. Preeclampsia. Diagnostics. Treatment. Management in pregnancy and labor.
8. Eclampsia. Clinic. Diagnostics. Intensive therapy. Complications for mother and fetus.
9. Maintaining pregnant women and women in labor with atypical forms of gestosis (acute fatty metamorphosis of liver, HELLP syndrome). Intensive therapy.
10. Indications for termination of pregnancy with gestosis.
11. Prediction and early diagnostic signs of gestosis.
12. Prophylaxis of gestosis.
13. Medications for treatment of gestosis.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## **Lesson 8**

### **Obstetrical bleedings**

1. Massive obstetric bleedings: risk factors, diagnostics, clinical picture, treatment, prevention.
2. Hemorrhagic shock in obstetrics: risk factors, diagnostics, clinical picture, treatment, prevention.
3. DIC associated with pregnancy: main causes and pathophysiology.
4. Stages of DIC development. Types of DIC (fulminant, acute, subacute, chronic).
5. Diagnostics, treatment and prevention of DIC.
6. Amniotic fluid embolism: risk factors, diagnostics, clinical picture, treatment, prevention.
7. Pulmonary embolism in pregnancy: risk factors, diagnostics, a clinical picture, the urgent help, prevention.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## **Lesson 9**

### **The abnormal puerperium**

1. Main forms of postpartum septic diseases. Classification of postpartum septic diseases by Sazonov-Bartels.
2. The predisposing factors leading to the development of postpartum septic diseases.
3. Protocol of management of women in postpartum period after the complicated childbirth and cesarean section.
4. Obstetric peritonitis: risk factors, diagnostics, clinical picture, treatment. Features of obstetric peritonitis after cesarean section.
5. Sepsis in the postpartum period: diagnostics, clinical picture, treatment.
6. Septic shock. . Intensive therapy. Complications for mother and fetus. Prevention. Rehabilitation.
7. Postpartum hypothalamic syndrome – a clinical picture, diagnostics, treatment.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## **Lesson 10**

### **Pediatric and adolescent gynecology**

1. Precocious puberty: iso-sexual and heterosexual, central and peripheral.
2. Clinic, diagnostics, methods of treatment, rehabilitation.
3. Delayed puberty: central, constitutional, peripheral causes. Etiopathogenesis. Clinic,
4. diagnostics, treatment, rehabilitation.
5. Lack of sexual development. Clinic, methods of treatment, rehabilitation.
6. Hypothalamic syndrome of the puberty period. Clinical manifestations, methods of treatment, rehabilitation.
7. Congenital abnormalities of the genital tract and methods of their correction.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## **Lesson 11**

### **Inflammatory diseases of the woman's reproductive system**

1. Modern approaches to treatment of pelvic inflammatory diseases (PID) of a nonspecific etiology.
- 2 . Pelvic inflammatory diseases of a specific etiology: gonorrhea, syphilis, AIDS, genital tract tuberculosis. Features of a current and therapy.
- 3 . Sexually transmitted infections (STI). Features of a current and therapy.
- 4 . Herpes genitalis - clinic, diagnostics, treatment.
- 5 . Human papillomavirus infection - clinic, diagnostics, treatment.
- 6 . Trichomoniasis - clinic, diagnostics, treatment.
- 7 . Bacterial vaginosis - clinic, diagnostics, treatment.
- 8 . Yeast infections (Candidiasis) - clinic, diagnostics, treatment.
- 9 . Ureaplasmosis and mycoplasmosis - clinic, diagnostics, treatment.
- 10 . Chlamydiosis - clinic, diagnostics, treatment.
- 11 . Conservative methods of treatment of PID, indications to surgical treatment.
- 12 . The rehabilitation and prognosis for reproductive health.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## Lesson 12

### Gynecologic emergency

**(ectopic pregnancy, ruptured ovarian cyst, adnexal torsion, degenerating leiomyoma)**

1. Gynecologic disorders with “acute abdomen”.
2. Differential diagnostics at a syndrome of “acute abdomen”.
3. The basic principles of management of patients with “acute abdomen” and pelvic pain.
4. Ectopic pregnancy, etiology, clinics, diagnostics, treatment.
5. Ruptured ovarian cyst. Clinical features, diagnosis, differential diagnosis and treatment.
6. Ovarian cyst torsion. Adnexal torsion. Diagnosis, clinical features, and peculiarities of surgical treatment.
7. Degenerating leiomyoma. Necrosis of myoma. Clinical signs, diagnostics and treatment.
8. Rupture of ovarian tumor. Clinical signs, diagnostics and treatment.
9. The perforation of the uterus: clinics, diagnostics, treatment.

### Literature

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## Lesson 13

### **Means and methods of contraception Induced abortion in early and late terms of pregnancy**

1. Traditional methods of contraception – advantages and shortcomings.
2. Intrauterine contraception – advantages and shortcomings.
3. Hormonal contraceptives. Classification. Advantages and shortcomings.
4. Medical effect of hormonal contraception.
5. Sterilization – indications, contraindications.
6. Management of emergency complications as a result of application of contraceptive methods and contraceptives.
7. Pregnancy interruption in early and late terms on medical and social indications.
8. Methods of interruption of pregnancy in early terms: indications, contraindications, anesthesia, possible complications depending on an method of interruption.
9. Methods of interruption of pregnancy in late terms: indications, contraindications, anesthesia, possible complications depending on an method of interruption.
10. Medical and social aspects of interruption of pregnancy of early and late terms.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## Lesson 14

### Climacteric syndrome

1. Physiology of the climacteric period.
2. Definition of premenopause, menopause, postmenopause, perimenopause.
3. Early and premature menopause.
4. Climacteric syndrome. Etiology. Pathogenesis.
5. Target organs. Risk factors. Classification.
6. Gynecologic and somatic problems of the climacteric period (early, average and late clinical symptoms). Diagnostics methods.
7. Management of patients with pathological climacteric period. Types of treatment: hormonal and non-hormonal. Homeopathic drug.
8. Hormonal replacement therapy, principles of administration, indication and contraindication, complication. Assessment of efficiency of treatment.
9. Postcastration syndrome. Peculiarities of hormonal replacement treatment.

### Literature

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.

## Lesson 15

### **Benign and premalignant lesions of the female reproductive organs**

1. Background diseases of vulva (lichen sclerosus, squamous hyperplasia, condyloma acuminatum): inspection, differential diagnostics. Methods of treatment.
2. Precancer diseases: vulva dysplasia (VIN). Etiology. Frequency of malignization. Clinic. Diagnostics. Methods of treatment. The indication to surgical treatment.
3. Etiology of cervical cancer. Risk factors.
4. Background cervical pathology: classification, clinical picture, diagnostics, treatment.
5. Precancer cervical diseases (CIN): classification, clinical picture, diagnostics and treatment methods.
6. Surgical methods of treatment of CIN: laser vaporization, diathermokoagulation, cryodestruction, radiowave excision, conization, etc. Features, indications, equipment of performance, forecast.
7. Types of prevention of cervical cancer (primary, secondary). Vaccination.
8. Screening for cervical cancer: characteristic, features of carrying out, types and efficiency.
9. Background and precancer pathology of endometrium: classification, clinical picture, diagnostics, treatment methods in young age and in postmenopause.
10. Etiology of benign pathology of mammary glands. Risk factors. Prophylaxis.
11. Rules of mammary glands inspection.
12. Pathological discharge from mammary glands. Tactics of the doctor.
13. Classification of benign pathology of mammary glands.
14. Clinical picture, diagnostics, principles of treatment of a mastopathiya. Indications to surgical treatment.

### **Literature**

Danforth's obstetrics and gynecology.- 7<sup>th</sup> ed. / with 54 authors.-1994.