

TSMU. Department of obstetrics and  
Gynecology and reproductive medicine

Examination issues:

1) Menstrual cycle:

Definition.

Different cycles of one physiological chain.

Hypothalamus – structure, function.

Pituitary – structure; types of gonadotropin's secretion. Regulatory function of gonadotropic hormones.

Ovaries – structure; ovarian cycle. Folliculogenesis; physiologic atresia; structure of dominant follicle; ovulation; lutein phase; dual dynamic of corpus luteus; hormonal balance in the I and II phases of cycle.

Uterus – structure; sublayers of endometrium; 4 phases ongoing in functional sublayer; correlations between ovarian and endometrial phases; causal factors of desquamation, or retention of functional sublayer.

Neurotransmitters; samples of positive and negative feedback.

Biological outcomes of menstrual cycle and their role in realization of reproductive function (ovulation; normal luteal phase).

Clinical parameters of menstrual cycle (volume of menses, duration, recurrence).

Application of menstrual cycle's peculiarities for conceiving, or contraceptive purposis.

Tests of functional diagnosis, based on recurrent hormonal changes during menstrual cycle (basal temperature, „pupil”-s sign, colpocytology).

2) Disturbances of menstrual function:

I amenorrhea.

Classification (pyramid-like).

True and pseudoamenorrhea.

Pseudoamenorrhea (causes, pathogenesis, clinics, treatment).

True physiological (infantile, menopausal, gestational, lactational) and true pathological amenorrhea.

Primary true pathological amenorrhea.

Secondary true pathological amenorrhea:

a) Hypothalamic.

b) Pituitary.

c) Ovarian.

d) Uteral.

Diagnostic principles in cases of amenorrhea (progesterone test; estrogen-progesterone test; 17-ketosteroids, oxicorticosteroids in the blood/urine; dexametazone test; prolactine, FSH, LH in the blood; sex chromatin and caryotype).

Principles of differential treatment.

## II Disfunctional bleeding.

Definition.

Juvenil and climacterial bleeding.

Ovulatory and anovulatory bleeding.

Types of ovulatory bleeding.

2 pathogenetical forms of anovulatory bleeding (persistence of dominant follicle and atresia of follicles). Clinical signs.

Anovulatory bleeding (stages of treatment):

- a) Hemostasis (symptomatic; hormonal; curetage).
- b) Regulation of hormonal balance; prevention of recurrent bleeding).
- c) Measures, according the age and reproductive desires (stimulation of ovulation; prevention/treatment of endometrial hyperplastic processes).

## III Algomenorrhea.

Defination (algomenorrhea; dysmenorrhea).

Primary and secondary algomenorrhea (characteristics and principles of treatment).

## 3) Neuroendocrine syndromes:

### I premenstrual S.:

Theories, clinical sings, treatment.

### II postcastral S.:

Pathogenesis; clinical signs (vegetodystonia, metabolic-endocrinological, neural-psicical); treatment.

### III PCOS:

Pathogenesis; 5 classical clinical signs; 3 clinical forms (ovarian, suprarenal, central); variability of clinical signs within itch clinical form; diagnostic measures (anamnesis; inspection; gynecological examination; US; CT of „sella turcica”; 17-retosteroids in blood/urine, thikness of endometrium); treatment (COC-s; stimulation of ovulation; surgical intervention); histopathological examination of endometrium (before surgical operation).

### IV Shien's S.:

Pathogenesis; clinical expressions of panhypopituitarism; treatment.

### V Chiari-Frommel's S.:

Triade of symptoms: hyperprolactinemia, galactorea, amenorrhea.

Functional hyperprolactinemia (treatment with parlodel, dostinex).

Hyperprolactinemia due to prolactinoma (CT of „sella turcica”; neurosurgical intervention by transphenoidal access, or radiotherapy).

VI Adrenogenital S.: (AGS):

Pathogenesis.

3 clinical forms (hereditary; prepubertal; postpubertal).

Clinical peculiarities of itch form.

The role of glucocorticoids in the treatment of AGS.

4) Family planning and contraception:

Induced abortion as a harmful method of fertility regulation.

Social and medical aspects of contraception.

Using of contraceptives for the prevention and treatment of different gynecological diseases.

Assesment effectiveness of concrete contraceptive by Pearl’s index.

Combine oral contraceptives (COC): composition; regime of application; mechanism of action; contraindications, disadvantages.

Mini-pili: structure; regime of application; disadvantages; complications.

Subdermal implants: duration, advantages.

I/M injection of gestagens: duration of action.

Sterilization: female’s and male’s sterilization. Types of female’s sterilization.

IUD: types; mechanism of action; contraindications; complications.

Barrier methods; spermicides.

Calendar method.

LAM.

Urgent contraception: COC; mifepristone; IUD.

5) Infertility:

Definition; classification (mechanical obstacles, endocrine, male’ form, caused by immunological incompatibility, unknown genesis).

Mechanical obstacle (in different parts of female’s genital tract; obliteration of tubes; intra and peritubal synechias. Using of methods, ascertaing tubal patency).

Methods for ascertaing ovulation and normal functioning of corpus luteus. Medications for stimulation of ovulation.

Spermogram. Endocrinological and genetical testing of males.

Cervical factor; artificial insemination.

In-vitro fertilization (main stages); icsi.

6) Sexually transmitted infections (STI):

Chlamydiosis (causal factor; prevalence; clinical signs; diagnostic tests; treatment; complications).

Gonorrhea (causal factor; clinical signs, diagnostic tests, treatment, complications).

Pelvic inflammatory diseases (PID): (definition; differential diagnosis; clinical signs; complications; conservative and operative treatment).

Genital herpes (causal factor; types of HSV; clinical signs; diagnostic tests; treatment; management during pregnancy and labor).

Genital condyloma (causal factor; serotypes of different risks; clinical signs; treatment; vaccination).

Syphilis (causal factor; stages; diagnostic tests; treatment).

AIDS (causal factor; complications; diagnostic tests; prevention).

Venereal lymphogranuloma (LGV).

Inguinal granuloma (Donovanosis).

Shancroid.

Molluscum contagiosum.

Parasitic infections (pubic pediculosis and scabies).

#### 7) Gynecological operations:

Classification (by mode of access)

- a) Hysteroscopic.
- b) Laparoscopic.
- c) Vaginal.
- d) Laparotomic.

I hysteroscopic access – (polypectomy; excision of submucosal nodule; synechiolysis; ablation of endometrium).

II laparoscopic access – (salpingotomy; salpingectomy; adnexectomy; ovarian resection; ovariectomy; total and partial hysterectomy; surgical sterilization).

III vaginal access – (vulvectomy; labioplasty; removing of the Bartholin gland's cyst; colpoptosis; excision of Gartner's cyst; anterior and posterior colporaphia; „Emet” operation; conic-like biopsy of cervix; curettage/vacuumaspiration of uterine cavity; hysterectomy by vaginal access).

IV laparotomic access – (salpingectomy; adnexectomy; ovarian resection; ovariectomy; total and partial hysterectomy; surgical sterilization).

#### 8) Antenatal and postpartum care:

I Antenatal:

8 antenatal visits.

Preconceptional care.

Signs of pregnancy.

Routine and additional examinations during I visit.

Main purposis and principles of care during subsequent visits.

Methods of examination in obstetrics.

Genetical screening in the I and II trimesters.

Conventional and warning signs during pregnancy.

Most significant screening, diagnostic and preventive measures, performed during pregnancy:

- a) Using of folic acid and iron-containing medications.
- b) Test of asymptomatic bacteriuria.
- c) Glucoso-tolerance test.
- d) Preventive dose of antiresus-immunoglobulin.
- e) Gravidogram.
- f) Using of Leopold's manœuvres.
- g) GBS-testing.
- h) Offering of labour's induction.

II Postpartum (puerperal):

Involuntary changes in female's organism.

Lactation.

Advantages of exclusive breastfeeding

Dangerous signs in puerperal period.

Recommendations regarding newborn's care, breastfeeding technics.

Using of contraceptives in different stages of postpartum period.