

**Ministry of health of Ukraine
Higher state educational establishment of Ukraine
«Ukrainian medical stomatological academy»**



«Approved

At the sitting of the chair of oncology
The minutes №2 from September 2, 2018
y. Manager of chair of oncology
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**METHODICAL POINTING
FOR INDEPENDENT WORK OF STUDENTS
DURING PREPARATION TO PRACTICAL EMPLOYMENT**

<i>Educational discipline</i>	<i>Oncology</i>
<i>Module №</i>	<i>I</i>
<i>Rich in content module №</i>	<i>3</i>
<i>Theme of employment</i>	Uterine cancer
<i>Course</i>	<i>V</i>
<i>Faculty</i>	<i>Medical №1, №2</i>

Poltava - 2018

THEME: «UTERIN CANCER»

1. Actuality of theme.

Morbidity of hormonal tumors grows in recent year, among them uterine cancer occupies the first place. The greatest indexes of morbidity are fixed among the population of the USA, Canada, Switzerland. In Japan morbidity below in all. High enough is morbidity in Ukraine. She presents 15,0 cases on a 100 thousand population with a tendency to the height. Middle age of patients with a hysterocarcinoma approximately 55. In this age patients very rarely see a doctor such symptom, as bleeding consider as a symptom of climax. The last years on a hysterocarcinoma began to be ill women of young age.

Uterine cancer of uterus arises up in most cases for women, that have a metabolic disturbance, concomitant diseases: obesity, diabetes mellitus, hypertensive illness, illness of liver and other. In muliebrias quite often there is a fibroma of uterus, of high quality tumors of ovaries, cystical ovaries et al. All of it must be known to the future doctors - gynaecologists, internists, endocrinologies, surgeons.

2. Concrete educational aims:

To know:

1. Etiology and pathogeny of uterine cancer;
2. Clinical classification of uterine cancer, classification by system of TNM;
3. There are obligatory methods of inspection of patients with a hysterocarcinoma;
4. Concomitant pathology for patients with a hysterocarcinoma;
5. There are basic methods of treatment of patients with a hysterocarcinoma (surgical, combined, radial, hormonal);
6. To know risk groups.

Able:

1. To define the stage of distribution of tumor process;
2. To conduct a common inspection (objective and special) for patients;
3. To define the value of additional methods of inspection for patients with a hysterocarcinoma (cytological research aspiration of cavity of uterus, factious scraping off of uterus and histological research of fabric, hysterosalpingography, ultra);
4. To appoint individual treatment of patients with a hysterocarcinoma in dependence on the stage of tumor, general of patient and her age;
5. Able to appoint prophylactic measures on a fight against these tumors.

3. Base knowledge, abilities, skills, are necessary for a study themes (interdisciplinary integration).

Disciplines	To know	Able
Anatomy	Anatomy of muliebrias (blood supply, lymphatic system)	Able correctly to understand etiology of disease, nosotropic clinical displays and prophylactic measures.
Pathoanatomy	Histological structure of tumors.	
General physiology	Physiology processes of organism.	
Physiopathology	Pathology of flowing of functions of and other endocrine, immune systems of organism.	
Biological chemistry	Fermentations of organism and, first of all, norm of flowing of biochemical processes.	
Therapy	Methods of general inspection of patients.	
Obstetrics and gynaecology	Methods of the special gynaecological inspections, precancerous diseases.	
Pharmacology	Groups of antitumoral preparations and mechanisms of their operating are on an organism.	

4. Task for independent work during preparation to employment.

4.1. List of basic terms, parameters, descriptions that a student must know.

Terminology

English	Russian	Latin
Tumor	Опухоль	Tumor
Stage	Стадия	Gradus
First	Первая	Prima
Second	Вторая	Secunda
Third	Третья	Tertio
Fourth	Четвертая	Quarta
Verification	Верификация	Verificatio
Suspicion	Подозрение	Suspiratio

4.2. Theoretical questions are to employment.

1. Anatomy of uterus.
2. Blood supply, lymph flow.
3. Histological structure of chase of body of uterus.
4. A volume of inspections sick is on uterine cancer.
5. Basic methods of treatment of patients.
6. Prognosis.
7. Prophylaxis.

4.3. List of educational practical tasks that must be mastered on practical employment :

- a review of neck of uterus is in mirrors;
- bimanual vaginal inspection;
- rectal research;
- collection of material is for cytological research from the cavity of uterus;
- factious scraping off of uterus (cavities of uterus and separately cervical channel);
- hysteroigraphy;
- ultrasound of uterus.

Professional algorithms are in relation to a capture skills and abilities

Signs of pathology	I nosotropic variant	II nosotropic variant
Frequency	(60 – 70 %)	(30 – 40%)
Menstrual function	Anovulatory bleeding of utricle	There are not the expressed violations
Genital function	Mionectic, sterility, self-abortions	Substantially not broken, sometimes sterility
Colpocytological	Estrogenic type of stroke	Atrophic type of stroke
Accompanying diseases and endocrine exchange violations	Obesity, diabetes mellitus hypertensive illness, disease of liver	Meet rarely, sometimes hypertensive illness
Algorithm: " Clinic uterine cancer "		
State of endometrium	Hyperplastic processes, adenomatosis	Atrophy
State of myometrium	Often fibroma uterus, endometriosis	Without pathologies
State of ovaries	Cysts of ovaries, syndrome of Shteina-Lewintalia	Φιόρο3
Degrees of differentiation tumors	High (more often I- I or II of feet)	Subzero - III of feet
A depth of invasion is in a myometrium	More often superficial	More often deep

Potency of lymphogenic innidiation	Not high	High
A sensitiveness is to progesterone	High	Subzero
Initially plural tumours.	Possible: ovaries, breast gland, colon, neck of uterus.	Not characteristic.
Prognosis	Favourable	Doubtful

Table of contents of theme.

a) the precancerosis diseases.

Pathoanatomy.

Timely treatment of precancerosis diseases is a prophylaxis of chase.

Students must know that according to classification of the World anticarcinogenic union, morphological changes of precancer and chase of body of uterus, following:

A. of high Quality changes:

- polypus of endometrium;
- hyperplasia of endometrium.

B. Atypical hyperplasia of endometrium (adenomatosis).

B. Malignant new formations:

- adenocarcinoma;
- clear cell carcinoma;
- squamous cancer;
- mixed cancer;
- undifferentiated cancer.

Atypical hyperplasia of endometrium (adenomatosis) is described by some researchers, as preinvasion cancer. For him characteristically excrescence of proliferative of different forms and size in the road clearance of gland at maintenance of basale membrane. There is large polymorphism of cages, as the phenomena of anisocytosis, change nuclear - cytoplasmic correlations.

b) Etiology and pathogeny.

Uterine cancer belongs to hormonal new formations. Estrogens is an influential factor in proliferation.

If the concentration of estrogens in blood is constantly increased, not counterbalanced by progesteronum, and the cages of endometrium find out the increased sensitiveness to estrogens then proliferation comes, certainly. In such situation, ripening of endometrium becomes impossible to the stage of secretion.

Such changes are observed at hypothalamus-hypophysis-ovarium disorders, anovulatory cycles, at the female tumors of ovaries, obesity.

The protracted stimulation of endometrium results in excessive (glandular) proliferation that can grow into excrescence of cancer tumor.

There are also genetic and viral theories. Immune status of organism matters in the origin of change of endometrium.

I. Hormonal.

A nosotropic variant is observed in 60 - 70% of patients with hyperplasia of atypical and characterized by a variety and in depth display of chronic hyperestrogenia in a report with violations of fatty and carbohydrate exchange. Clinical symptomocomplex shows up the anovulatory bleeding of uterine, fertility, late onset of menopause; accompanied by hyperplasia of soft fabrics of ovaries, in connection from female we by the tumors of ovaries and syndrome of Stein-Leventhal, by hyperplastic processes in endometrium, that surrounds polyps, cells of hyperplasia of atypical or change, by a hysteromyoma. Exchange violations are taken to obesity and diabetes mellitus.

II. Autonomous.

This nosotropic variant marked in 30 - 40% of patients, indicated endocrine are the exchange violations expressed unclearly or in general are absent. Characteristic connections of fibrosis of stroma of ovaries and atrophy of ovaries, on a background that there are polyps, atypical hyperplasia and cancer. For patients with a hysterocarcinoma often find out polyneoplasia, in particular, cancer of mammary gland, thick bowels, cancer stomach, cancer of ovaries, cancer of neck of uterus and other.

b) Clinic of disease.

By the most frequent complaint of patients with a hysterocarcinoma it is a bleeding discharge. For the women of menopausal period deserve attention be - what bleeding or watery (white) excretions. Complaints on pain at it is happened cancer of body of uterus rarely, mainly arise up at the started stages. In the cases of distribution of tumor process possible metastases are in ovaries, Douglas space, stuffing-box, or germination of process in the wall of urinary bladder, rectum. Possible appearance of pyometra, increased temperature, anaemia.

c) Diagnostics.

At objective research pay attention to enlargement of uterus, heterogeneity of her consistency, softening or deformation. In transition a process on cervical channel is palpated bulge and rigidity of neck of uterus.

Rectal research helps more precisely to learn the state to the parametrium (size of infiltration, dependence of him on the bones of pelvis), presence of metastases in the regional lymphonoduss of pelvis.

Research cytological is research of aspiratum of cavity of uterus, cervical channel.

Histological research is researches of fabrics, what cavities of uterus and cervical channel purchased by the separate scraping off.

Hysterography, hysteroscopy, ultrasound - gives an opportunity to recognize the sizes of uterus, may be in detail determination of localization and sizes of cancer process in the cavity of uterus, variants and deep germination in a myometrium and other.

d) The differentiated diagnosis.

Differentiate with cancer the necks of uterus, chorionepithelioma uterus, by the fibroma of uterus, hyperplasia of endometrium and polyposis, sarcoma of uterus.

e) Treatment.

Surgical method (basic method).

Volume of surgical interference :

1. Simple extirpation uterus are with appendages.

Testimony: placing of tumor in days an uterus, patients years old with the expressed obesity, cardiovascular diseases, diabetes, varices of lower limbs.

2. Extended extirpation uterus with appendages.

Testimony: a tumor takes all cavity of uterus, in particular with a transition on cervical channel, tumors of subzero degree of maturity and absence of contra-indications to the highly traumatic operation.

With the aim of ablative and prophylaxis of relapses for patients apply a postoperative irradiation. After the presence of contra-indications to surgical interference, can become the method of choice it is united is a radical method of treatment. Essence of him consists in the tele-irradiation of parametrium and pin (internal) irradiation of basic hearth in an uterus.

Endocrinotherapy.

Use synthetic progesterone, in particular, 17 - hydroxyprogesteron-capronat, during 6 months on a chart, and also Depostat and Depot -provera.

Chemotherapy.

Use in cases at presence of metastases in ovaries, to the vagina, and also at remote metastases and at the relapses of tumors.

Prognosis: remote consequences of treatment of cancer of body of uterus depends on the stage of process, histological structural and to the degree of differentiation of tumor.

At the defeat of cavity of uterus a tumor 5 - the annual curing presents 65%.

Risk factors:

- There are patients with a diabetes mellitus;
- There are patients with obesity;
- There are patients with lipemia;
- Patient with a fibroma uterus in tridges - and postmenopausal period;

- There are patients with arterial high blood pressure;
- Women are with negative anamnesis;
- Women that bore a large fetus;
- Women are with late menopause;
- Women are with disfunction of ovaries and violation of menstrual function;
- Women that were sterile;
- Women that had a syndrome of cyst ovaries;
- In the past cancer of organs of the reproductive system.

Materials are for self-control

- Basic etiologic factors that predetermine the origin of change of body of uterus.
- Classification of change of body of uterus.
- Precancerous diseases.
- Basic histological structure tumors and levels of their differentiation.
- Clinical symptoms of illness.
- Obligatory methods of inspection and their results.
- Additional methods of inspection and their informing.
- Methods of treatment of change of body of uterus.
- Testimony to outcomes of extirpation uterus with appendages and to the extended extirpation uterus with appendages.
- It is united is a radical method of treatment.
- Endocrinotherapy of change of body of uterus.
- Prognosis.
- Risk groups.

Recommended literature:

a) Basic

1. Oncology / [Edited by prof. I.B.Shepotin, prof. R.T.Evans]. – Kiev: Medicine, 2008. – 496 p.
2. Clinical oncology / [V.Sorkin, A.Popovich, Yu. Dumanskiy and oth.]; under the edit. of the prof. G.V.Bondar. – Simferopol, 2008. – 192 p.

b) Additional

1. Ain KB: Anaplastic thyroid carcinoma: a therapeutic challenge. Semin Surg Oncol 1999; 16: 64-69.
2. Scully C, Field JK, Tanzawa H: Genetic aberrations in oral or head and neck squamous cell carcinoma (SCCHN): 1. Carcinogen metabolism, DNA repair and cell cycle control. Oral Oncol 2000 May; 36 (3): 256-63.

B. Tests of initial level of knowledge on the topic: "Uterine cancer".

I. Name typical symptoms for patients with a hysterocarcinoma:

- a) Temperature;
- b) Bleeding;
- c) Vomiting;
- d) Pain;
- e) Dysuric problem;
- f) Nausea, vomiting.

II. Name concomitant diseases characteristic to the patients with a hysterocarcinoma:

- a) Ischemic heart, obesity trouble;
- b) the Chronic bronchitis, anaemia;
- c) the Diabetes mellitus, obesity;
- d) Hypertensive illness, ischemic heart trouble;
- e) hepatocholecystit.

III. Specify, what inspections have a most value at diagnostics of uterine cancer.

- a) Biopsy of neck of uterus;
- b) the gracious scraping off of uterus.
- c) Cytology of cavity of uterus.
- d) Colposcopy.
- e) Culdoscopy.

IV. Most reliable diseases that warn uterine cancer.

- a) Erosion and polypus of neck uterus.
- b) Glandular hyperplasic of endometrium.
- c) Atypical hyperplasic of endometrium.
- d) Chronic endometrit.
- e) Adenomatosis of endometrium.

V. From anamnesis of patients on uterine cancer mostly there are such problems:

- a) Violation of menstrual function, bleeding.
- b) Bleeding discharges.
- c) the Frequent luing-ins, abortions.
- d) Untaking away of pregnancy.
- e) Reception of hormonal contraceptives.

VI. Name, what diseases it follows mostly to differentiate from uterine cancer:

- a) fibroma of uterus.
- b) cystoma of ovary.
- c) cancer of neck of uterus.
- d) cancer of vulva.
- e) cancer of rectum.

VII. Define the absent nosotropic method of treatment of chaste of endometrium:

- a) Surgical.
- b) it is Incorporated - radial.
- c) Combined.
- d) Chemotherapeutic.
- e) ---.

VIII. Most sensible age for the disease of cancer of endometrium:

- a) 30 – 40y.
- b) 40 – 50y.
- c) 50 – 60y.
- d) 60 – 70y.
- e) 70 and anymore.

IX. In the clinical group of patients with a diabetes mellitus, obesity, hypertensive illness with most authenticity it follows to expect appearance of chaste :

- a) of vulva.
- b) of pancreas.
- c) of the mammary gland.
- d) Livers.
- e) Ovaries.

X. In the clinical group of patients with a diabetes mellitus, obesity, hypertensive illness with most authenticity it follows to expect appearance of chaste :

- a) Stomach.
- b) Rectum.
- c) Bowel.
- d) Necks of uterus.
- e) Bodies of uterus.

Right answers:

I). b. II). c. III). b. IV). c. V). d. VI). c. VII). hormonal. VIII). c. IX). c. X). d.

C. The situational tasks for self-control.

Task №1.

For a patient 57, that suffers diabetes, obesity of II of degree, 3 months ago bleeding excretions appeared from a vagina. During a gynaecological review: neck of uterus and vagina - without pathology. An uterus is megascopic to 8 week's pregnancy, uneven closeness. The diagnostic scraping off of mucous cavity of uterus is conducted. At histological research it is set: the high-differentiated cancer of body of uterus. Plan of treatment?

Standard of answer :

Without regard to a high operating risk then of preparation (internist, endocrinology), it is necessary to execute total extirpation uterus with appendages. Farther at testimonies - radial or endocrinotherapy.

Task № 2

For a woman 60 менопауза 8, twice there were ichor excretions from a vagina. Gynaecological was not ill. It is not educed at vaginal research of pathological changes. Previous diagnosis. Plan of additional researches.

Standard of answer :

1. Cancer of body of uterus
2. Aspiration biopsy of perigastrium of uterus, hystero-graphy, fractionous scraping off of uterus.

Task № 3.

The patient of 62, menopause, notices periodic bleeding excretions from a vagina. In the past did not suffer gynaecological diseases. At vaginal research: the neck of uterus is not changed, an uterus is a bit megascopic. At the aspiration biopsy of material from the cavity of uterus the set diagnosis: lowdifferentiation cancer of uterus. Diagnosis. Plan of treatment.

Standard of answer :

1. Uterine cancer
2. 1-and the stage is an operation of extirpation uterus with appendages.
3. 2-and the stage is radial therapy (if it is staggered to 1/3 myometriums).

Task №4

A patient 65 an internist has in an account concerning hypertensive illness, hepatocholecystitis, obesity. A week ago for her bleeding excretions appeared from genital tracts. A patient appealed to the internist, he appointed hypotension therapy to her. The state of patient became better and close 6 months all was all right, but then again bleeding excretions appeared suddenly. A patient visited a gynaecologist that offered to her an inspection in the conditions of gynaecological permanent establishment. Was there correct tactics of internist and that he had to do? What inspections does it follow to offer to the patient in the conditions of gynaecological permanent establishment?

Standard of answer :

1. Wrong. An internist had to direct a patient to the gynaecologist.
2. Aspirate of cavity of uterus with cytological research, factious scraping off of uterus with histological research.

Task №5.

A patient 46 a gynaecologist has in an account with a diagnosis relapsing polyposis of endometrium, concerning what the fractionous scraping off of uterus was 3 last the (with an interval 1,5) executed her. Histological research educed in a cervical channel fibrotic is an adenomatous polypus, and in the cavity of uterus glandular – cystophorous hyperplasic. The patient supervisions offered to. Treatment was not appointed. Bleeding excretions appeared lately. A patient did ultrasound. Glandular - cystophorous hyperplasic of endometrium is set. Correct tactics of doctor of gynaecologist? What was necessary to be done? Are there hospital tactics on the nearest period?

Standard of answer :

1. Wrong. It was necessary to appoint to the patient a hormonotherapy after scraping off of cavity of uterus (progestinin).
2. It is now necessary also to do the fractionous scraping off of uterus and appoint a curative endocrinotherapy.

Task №6

A patient 48 appealed to the doctor with complaints about a bleeding selection from genital tracts during 20 days and related to menstruation. Gynaecological inspection: neck of uterus without pathologies, uterus megascopic, soft, appendages of uterus without features. From a cervical channel distinguished darkly is red blood. Conservative therapy was conducted within a week, without an effect. It is done ultra sound. Hyperplasic of endometrium. Scraping off of cavity of uterus is done in a gynaecological separation. Histology is an adenocarcinoma. Clinical diagnosis. Stage. TNM. Clinical group. Hospital tactics.

Standard of answer :

1. Uterine cancer. T1N0M0, clinical group II a .
2. Surgical treatment the volume of that is necessary to be specified then inspection in an oncologic dispensary.

Task №7

Patient 45, suffers on hypertensive illness, obesity, in addition she have fibromioma uterus of small sizes. early in life had violation of menstrual cycle, bleeding. long time could not become pregnant, then there was wilful abortion in 27 and only in 32 brought child into world. Last month, bleeding appeared. It is done ultra sound is hyperplasic of endometrium. Scraping off of cavity of uterus is educed atypical hyperplasic of endometrium. A patient is operated. After an operation a microslide is examined, a tumour filled all cavity of uterus. Postoperative histological research educed the highly differentiated adenocarcinoma. Clinical diagnosis, classification, TNM, clinical group. Further tactics of treatment.

Standard of answer :

1. Uterine cancer. T1EN0M0, clinical group III.
2. Radial and endocrinotherapy.

Task №8.

Patient 76, appealed to the doctor with complaints about the considerable bleeding from genital tracts. It is ill for a year. Before bleeding excretions were insignificant, increased then, now there is bleeding and considerable stomach-aches. It is on an account for endocrinology with a diagnosis diabetes mellitus, obesity. Scraping off of cavity of uterus is done. Histological research is the low differentiated adenocarcinoma. Research ultra sound metastasis tumor in a liver, by a size an about 3 cm. Clinical diagnosis, stage, clinical group. Curative tactics.

Standard of answer :

1. Uterine cancer, T3N0M1, clinical group IV.
2. Symptomatic treatment.

Task №9.

Patient of 52, a week ago bleeding excretions appeared from genital tracts. In an analysis cancer of the left mammary gland T2N0M0 clinical group III. 5 ago to the patient a radical mastectomy was executed on the left and postoperative irradiation. Then a patient accepted tamoxiphen during 2. The diagnostic scraping off of cavity of uterus is done in a gynaecological separation. Histological research is an adenocarcinoma of uterus. Diagnosis? Is there the stage by system of TNM? Clinical group? Curative tactics?

Standard of answer :

1. Initially are plural malignant tumors. Cancer of the left mammary gland. T2N0M0, clinical group III. Uterine cancer of T1N0M0, clinical group IIa.
2. Surgical treatment the volume of that will be set then to the inspection.