

**MINISTRY OF HEALTH PROTECTION UKRAINE
UKRAINIAN MEDICAL STOMATOLOGICAL ACADEMY**

DEPARTMENT OF ONCOLOGY



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conference** Protocol №2 from September,
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Manager of department
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METHODICAL INSTRUCTSON FOR STUDENTS

5 course of medical faculty

THEME: “CANCER OF STOMACH”

Educational object: oncology

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Theme: Cancer of stomach**Amount of hours : 4 educational hours****Material and methodical providing of theme: educational room, wards surgical separation, endoscopy cabinet, roentgenologic cabinet. Methodical developments for students, tests, tasks, tables.****1. ACTUALITY OF THEME**

The cancer of stomach remains to one of the most frequent diseases in a world. Annually registry of to 800 thousand of new cases and 630 thousand of deaths from this disease. By countries „leaders” there is Japan, Russia, Chilean, China (40% all cases). In the USA 24 is annually registered thousand of new patients. In Japan morbidity at men is 78 and at women 33 cases on 100 thousand of population. On Ukraine morbidity on the cancer of stomach in recent years diminished, but remains the greatest among the tumours of organs of digestion and is now 27 on 100 thousands population. After the incurrence of patients this pathology takes 3 grade seats among all malignant new formations. Men are ill more frequent, correlation is 3:1. Thus in 40-60 % patients appear in the III-IV stage of illness. (For comparison in Japan in 50% patients find out an early cancer). Among first found out patients, it is possible to execute radical treatment not more than in 17-25% diseased. Palliative or symptomatic treatment is conducted to other patients.

2. EDUCATIONAL AIMS**To know (D=II)**

1. Etiology, pathogeny of cancer of stomach
2. Clinical classification
3. Obligatory methods of inspection of patients
4. Concomitant pathology
5. Basic methods of treatment of patients with the cancer of stomach
6. 5.To know risk groups

To be able (D=III)

1. To conduct the common objective and special inspection of patients
2. To define the value of additional methods of inspection at patients
3. To appoint individual treatment of patients with the cancer of stomach depending on a stage
4. To appoint prophylactic measures on the fight against this pathology

Practical skills on a theme:

- review and palpation of patients
- palpation of axillar and neck lymphonoduss
- rectal research
- to know as gastroscopy is conducted
- to be able to read sciagrams at roentgenoscopy and sciagraphy
- ultrasonic research
- to work out a plan of treatment of patient with the cancer of pancreas

Terminology

Ukrainian	Russian	Latin
Рак шлунка	Рак желудка	Cancer ventriculi
Виразка шлунка	Язва желудка	Ulcus ventriculi
Метапластичний гастрит	Метапластический гастрит	Gastritis metaplasticus
Аденоматозний поліп	Аденоматозный полип	Polypus adenomatosis
Множинний поліпоз шлунка	Множественный полипоз желудка	Polyposis ventriculi multus
Кукса шлунка	Культя желудка	Stump ventriculi
Залозисто-плоскоклітинний рак	Железисто-плоскоклеточный рак	Glandular epithelial cancer
Підшлункова залоза	Поджелудочная железа	Pancreas

3.MATERIALS PREAUDITORY INDEPENDENT WORK.

3.1. Inter-disciplines integration

(Base knowledges, abilities, skills necessary for the study of theme)

Discipline	To know	To be able
Anatomy	Structure of stomach, blood supply, lymph drainage	
Anatomical pathology	Morphological changes at the precancerous diseases and states in the mucus layer of stomach, histological variants of malignant process	To estimate the results of cytologic and histological researches
General surgery and therapy	Methods of physical, laboratory and instrumental inspections of stomach. Volume and principles of surgical treatment of diseases of stomach.	To conduct physical and clinical inspection of patients with the cancer of stomach. To be able to read sciagrams x-ray photography inspection of stomach

3.2.Contents of theme.

Etiology

Reasons of origin of cancer of stomach finally not found out. In the experiment the well-proven possibility of artificial recreation of some tumours of stomach (cancer) by chemical carcinogens. The role of feed is important: it is anymore in the cancer of stomach hydrocarbon meal, lack of vitamins in a meal, especially vitamin of A, ascorbic acid. Higher morbidity is observed in districts with high maintenance of nitrates in soil, to water, meal. Nitrates during co-operation with amines in a stomach form nitrosamines carcinogenic influencing, which are well-proven. Nitrosamines appears at mionectic acidity of gastric juice. High risk to become ill on the cancer of stomach at persons which began to burn early in life. Morbidity on the cancer of stomach among smokers fourfold higher, than in those, that does not smoke. The use of salt products multiplies the risk of disease in once or twice, and the use of milk and green goods diminishes the risk on 30%.

A genetic factor acts large part. It is set that at related by blood and among persons with a blood type (II) the cancer of stomach meets considerably more frequent (on 20%), than at the patients of control group. Etiologic defined the chronic diseases of mucus shell of stomach, deficit of vitamin of C, conservants, nitrosamines matter.

Precancersis states:

- Pernicious anaemia
- Atrophic gastritis
- State after the resection of stomach (especially in 10-20 years after a resection on Bilrot-II)
- Adenomatous polypuses of stomach (frequency of is 40% at polypuses >2 cm in a diameter). Most polypuses of stomach hyperplastics, they are not attributed to the precancerous states
- immunodeficits, especially the variable hyperplastic unclassified states (risk of cancers - 33%)
- Infectioning *by Helicobacter pylori (base-line infection)* .

The cellregenerating mucus takes place during 2th days, replacement of epithelial integument – 4-8 days. The enhanceable cellregenerating development of intestinal metaplasia of epithelium precedes

to the origin of cancer proliferation is multiplied with growth of processes of atrophy. Frequency of regeneration of polypuses in the cancer of stomach depends on sizes, histological structure. Granulomatosis polypuses arise up as reaction on the irritation of mucus shell and does not relate to the tumour process.

Morphologically the precancerous states are characterized by the proliferations changes in an epithelium with violation of ripening of mews, that is named dysplasia. Distinguish three degrees of displasias.

At the I degree an epithelium differs from normal only by a tendency to proliferation displasia of the II degree is characterized by obvious atypies of mews in the deep layers of epithelium. Violation of structure of all ephithelial layer with atypies of mews testifies to the presence of dysplasia of the III degree.

Can find out dysplasia of epithelium during morphological research of the different precancerous (base-line) states (gastritis, polypuses, ulcers, mucus shell of stump of stomach and others like that). These morphological changes really promote the risk of development of cancer of stomach, and persons with found out the changes as dysplasia need intent clinical supervision and, if it is necessary, treatment.

Risk groups:

1. Persons to which was filled 50 years and more senior
2. Persons which practise upon smoking and alcophol
3. Workers of certain professions (drivers, workers of industrial enterprises)
4. Persons the relatives of which were ill a cancer
5. Patients with the chronic gastric diseases

Frequency of defeat of different departments of stomach is different. In lower third of stomach (antrum department) localization of tumour in 50% cases, in middle – 15%, overhead – 25%, 10% cases on the cardioesophagus department of stomach.

Pathoanatomy

Localization and morphological structure of tumour determines adequacy treatment and prognosis of disease.

Macroscopic forms of growth of cancer of stomach:

I. Primary cancer.

A. Exophytic form:

- Island cancer
- Acetabuliform cancer is most characteristic for a stomach.
- Polypoid cancer - in a stomach meets rarely and has the best prognosis.

B. Endophytic (infiltrate) form:

- ulcer-infiltratic cancer
- diffusion-infiltrate cancer - (*linitis plastica*). At this form of disease there is widespread tumour infiltration of submucosae mucus and (skyr, submucose and squamous-infiltrate forms).

B. Mixed form

II. Cancer from a polypus.

III. Cancer from an ulcer.

Histological classification of cancer of stomach

From data of WHO (in 1997) more frequent there is the histological form of cancer of stomach is (different differentiation).

I. Adenocarcinoma:

- *Signet-ring cell carcinoma* are the mews of tumour contain a lot of mucus.

II. Glandular-squamouscell carcinoma

III. Squamouscell carcinoma

IV. Undifferentiated cancer.

V. Unclassified cancer.

Classification of cancers of stomach

(code of ICD-10 C16) by system of TNM (6th edition, 2005 year).

TNM Clinical classification

T is the Primary tumour

T_x — it is not enough information for estimation of primary tumour

T₀ is a primary tumour does not concerne

T_{is} — carcinoma in situ: intraepithelial tumour without the invasion of basale membrane

T₁ is a tumour infiltrate a basale membrane or submucous layer

T₂ is a tumour infiltrate a muscular or subserosal layer

T₃ is a tumour germinates serosa (visceral peritoneum) without an invasion in neighbouring structures ^{1, 2, 3}

T₄ is a tumour spreads on neighbouring structures ^{1, 2, 3}

N is the regional lymphatic nodes

N_x — it is not enough information for estimation of the state of regional lymphatic nodes

N₀ — there are no signs of defeat of regional lymphatic nodes

N₁ are the discovered metastases in 1-6 regional lymphatic nodes

N₂ are the discovered metastases in 7-15 regional lymphatic nodes

N₃ are found out metastases in more than in 15 regional lymphatic nodes

M is the remote metastases

M_x — it is not enough information for determination of remote metastases

M₀ are remote metastases do not concerne

M₁ is present remote metastases

G is histopathologic gradation

G_x is Degree of differentiation can not be certain

G₁ it is the High degree of differentiation

G₂ it is the Middle degree of differentiation

G₃ it is the Low degree of differentiation

G₄ it is the Undifferentiated tumour

Groupment after stages

Stage 0	T _{is}	N ₀	M ₀
Stage of IA	T ₁	N ₀	M ₀
Stage of IB	T ₁	N ₁	M ₀
	T ₂	N ₀	M ₀
Stage II	T ₁	N ₂	M ₀
	T ₂	N ₁	M ₀
	T ₃	N ₀	M ₀
Stage of IIIA	T ₂	N ₂	M ₀
	T ₃	N ₁	M ₀
	T ₄	N ₀	M ₀
Stage of IIIB	T ₃	N ₂	M ₀
Stage IV	T ₄	N ₁ , N ₂ , N ₃	M ₀
	T ₁ , T ₂ , T ₃	N ₃	M ₀
	any T	any N	M ₁

Clinic

In the early stage of development of cancer of stomach, clinical picture of him difficult, varied and does not have typical signs. The characteristic symptoms of cancer of stomach appear, as a rule, on the late stages of disease. *A.I. Savitski* offered in the clinical picture of cancer, that develops, to select not separate “suspicious symptoms”, and certain clinical “syndrome of small signs”, that contraposition to the well-known “large” clinic of cancer of stomach, that represents, as a rule, development and quite often finishing phase of disease.

The syndrome of small signs” includes the following groups of symptoms:

- ***change of feel of patient***, that is expressed in appearance during the last weeks or months of amotivational general weakness, decline of working capacity, rapid fatigueability.
- ***psychical depression*** is the loss of gladness of life, interest to circumferential, labours, apathy, estrangement.
- ***amotivate proof decline of appetite***, sometimes complete loss of him, up to disgust for a meal.
- ***phenomena of “gastric discomfort”*** is loss of physiology sense of pleasure from acceptance of meal, with simultaneous unpleasant local gastric symptoms is feeling of sense fullness of stomach, holding apart gases, sense of weight, sometimes pain under a breast.
- ***causeless making progress weightloss*** that is accompanied by the pallor of skinning covers and other phenomena of anemia.

Symptoms of the neglected cancer of stomach

- ***pain in to the epigastrium*** is observed in 70% patients.
- ***anorexia*** (absence of appetite) and weightloss characteristic for 70-80% patients.
- ***nausea and vomit*** at the defeat of distales departments of stomach; vomit is result of obstruction of antrum by a tumour, but can be investigation of the broken peristalsis of stomach.
- ***disphagia*** at the defeat of cardial department.
- ***sense of early satiation by a meal***; diffuse cancer of stomach often associate with sense of rapid satiation, because the wall of stomach can not normally stretch.
- ***the gastroenteric bleeding*** at cancer of stomach takes place rarely (less 10% patients).
- ***a weakness and fatigueability*** arise up the second time (including at chronic bleeding and anaemia).

Diagnostics

For substantiation early diagnostics of cancer of stomach in that stage of disease, when a tumour keeps indoors outside staggered organ, doctor must skilfully and necessarily complex to use all methods of clinical inspection and to know the value of each of them.

Palpation of stomach in position of patient on the back, on a right side and standing (at localization of tumour highly on small curvature). In the late stages of cancer of stomach tumour, that appears at palpation, can appear by a not basic primary tumour, and its metastases. An objective review can be considered complete, if there will not be the inspected places of the most frequent metastases: in a left supraclavicular fossa is metastasis of *Virchow's*, in pararectal space (at finger rectal research) is metastasis of *Schnitzeller's*, at women in ovaries is metastasis of *Krukenberg's* and, finally, metastasis in a umbiliculus (sisters are *Joseph*).

The metastases is carried out lymphogenic, hematogenous, implantations and mixed ways.

Implantaciones of peritoneum. hematogenous is metastasis of *Schnitzeller's*, metastasis in a umbilicus, in ovaries (*Krukenberg's*), liver, lungs. Lymphogenic metastasis of *Virchow's* (in a left supraclavicular area). To ragional lymphonoduss along small and large curvature of stomach, along left gastric, general hepatic and splenic arteries. Anamnesis at the cancer of stomach short, lasts, as a rule, a few months, rarely can be more than year. From the special methods of diagnostics are basic endoscopy and roentgenologic. The small tumours (to 2 cm) roentgenologic can not be discovered.

The large value has research of pneumorelief stomach at the double and triple contrasting (pneumography peritoneal). For a diagnosis endoscopic research is most informing. During endoscopy always it follows to do a biopsy.

By these two researches it is possible to diagnose correct in 98% patients.

The early diagnosis of cancer of stomach can be defined by prophylactic reviews (especially risk groups).

For clarification of diagnosis use the auxiliary methods of inspection:

- gastroduodenoscopy with an obligatory biopsy
- roentgenoscopy with sciagraphy of stomach
- ultrasound investigation of stomach
- computer tomography
- laparoscopy
- punctate biopsy of megascopic lymphonoduss
- if necessary diagnostic laparotomy.

It is possible to set the final diagnosis of cancer of stomach only applying complex diagnostics.

It follows to conduct **a differential diagnosis** with such diseases:

- chronic gastritis
- gastric ulcer
- poliposis of stomach

Principles of treatment

Treatment of cancer of stomach depends on prevalence of tumour at a stomach, degree of defeat of regional lymphatic nodes and presence of remote metastases.

- **Operation** is the method of choice; at a infiltrate form the 5-years-old survival is observed in 12% cases. At superficial localization of tumour the 5-years-old survival can achieve 70%. At a cancer in a gastric ulcer prognosis a little the best is the 5-years-old survival is 30-50%.
 - ✓ **Subtotal distal resection of stomach** with and small epiploons at localization of tumour in the distal departments of stomach.
 - ✓ **Subtotal proximal resection of stomach** with and small epiploons at the defeat of cardial part.
 - ✓ **Gastrectomy** at the defeat of body of stomach or at the infiltrative tumours located in each of his parts.
 - ✓ **Combined gastrectomy** at the contact growth of tumour in contiguous organs (for example, in a pancreas). Execute them in a single block.
 - ✓ **The palliative resections of stomach** are executive at development of stenosis of stomach or bleeding from a tumour, that disintegrates.
 - ✓ **Symptomatic operations** are imposition of gastrointestinal anastomosys

Ablation of regional lymphatic nodes at operations on an occasion the cancer of stomach conduces to the increase survival of patients, that is why **lymphadenectomy is rotined to all patients.**

- **A chemotherapy** represses malignant growth in 25-40% cases, but little influences on survival.
- **Question about expedience of adjuvant therapy** after operative treatment potentially curabiliti tumours debatable enough; however, at application of 5-FU, doxorubicin and mytomicyn a certain positive effect is attained. At inoperable tumours some temporal positive effect it can be attained at application of combined chemo- and radial therapy.

Prognosis

A prognosis after operative treatment of malignant tumours of stomach largely depends on the depth of growth by the tumour of wall of stomach, degree of defeat of regional lymphatic nodes and presence of remote metastases, but a prognosis in whole remains bad enough. If a tumour does not growth serosa of stomach in default of bringing in of regional lymphatic nodes, the 5-years-old survival at such patients is approximately 70%. This value goes down catastrophically, if a tumour growth serosa or will strike regional lymphatic nodes.

3.3. Recomend literature:

Basic:

1. Oncology after ред. В.П. Баштана, А.Л. Одабашяна, П.В. Шелешка, Тернопіль, “Укрмедкнига” 2003р.
2. Б.Т. Білінський, А.І. Гнатишак “Oncology”, 1992р.
3. Oncology of /За ред. Б.Т. Білінського, Ю.М. Стернюка, Я.В. Шпарика. it is Lvov: World medicine, 1998. - 272с.
4. Oncology. After ред. Б.Т. Білінського, Ю.М. Стернюка, I. In Шпарика. it is Kiev: Health, 2004. – 527с.

Additional:

1. В.Х. Василенко, С.И. Рапопорт, Г.В. Цодиков /Опухоли желудка, клиника и диагностика. it is Moscow, Medicine. – 1989. – 287с.
2. А.А.Клименков. Ю.И.Патютко “Опухоли желудка.” 1988г.
3. Справочник онкологии под редакцией ак. Трапезникова Н.Н. is Медиа. - 1996г. 624с.
4. Хендерсон Д.М. “Патофизиология органов пищеварения”. - L-R New –York. - 1997. – 284с.
5. Справочник онкологии. Под ред. проф. Шалимова С.А., проф. Гриневича Ю.А., проф. Мясоедова Д.В. Kiev, Health – 2000р. – 558с.
6. И.Б. Щепотин, Р.Т. Эванс «Cancer of желудка». Практическое руководство он профилактике, диагностике и лечению. Киев, «Book Plus», 2000г. – 227с.

3.4. Materials for self-control:

A. Questions for self-control

1. What place occupies the disease on the cancer of stomach among all onkopathology (and separately at women and men)
2. Blood supply of stomach.
3. Lymph flow.
4. What histological structure of tumours of stomach meets more frequent in all.
5. In what organs more frequent all the cancer of stomach are metastasing.
6. On the basis of what inspections it is possible to diagnose "early cancer"
7. What „brush" biopsy
8. Name symptoms characteristic for a concept „early cancer of stomach"
9. From what a prognosis depends at patients with the cancer of stomach
10. What types of treatment are used at the tumours of stomach

B. Testes for self-control.

№1. What anatomic parts does have a stomach ?

1. cardiac and pyloric portion
2. cardiac and antral portion
3. body and pyloric departments
4. cardial, body of stomach, pyloroantrum parts (+)

№2. Nausea and vomiting in 30 – 40 minutes after the reception of meal arises up at the impression:

1. Forestomach
2. Bodies of stomach
3. Pyloroantral department of stomach (+)

№3. At the tumour lesion of pyloroantral department of stomach a function is violated above all things:

1. evacuation
2. Reservoir
3. Secretory
4. Bactericidal (barrier)

№4. At the tumour lesion of body of stomach at first is violated function:

1. Reservoir
2. Secretion
3. Bactericidal (barrier)

№5. Secondary anaemia meets more frequent in all at the lesion :

1. Cardiac portion of stomach
2. Fund and bodies of stomach
3. Lesser curvatures of stomach
4. Pyloric portion

№6. At a patient 56 years the set diagnosis „Cancer of stomach, cardiac part T₂N₀M₀ " To define the volume of surgical interference.

1. Subtotal proximal resection of stomach. (+)
2. Subtotal distal resection.
3. Gastrectomy.

№7. At sick a diagnosis is set in 61 „Cancer of stomach, pyloriantrum regions, stenosis of initial department of stomach T₃N₀M₀ "" To define the optimum volume of treatment.

1. Distal subtotal resection of stomach (+)

2. Gastrectomy.
3. Gastrointestinal anastomosis.

№8 For the cancer of cardial portion of stomach not characteristically:

1. Dysphagia
2. Satiation to the reception of meal
3. Pains behind breastbone.

№9. What authenticity of survive of cancer of stomach depends from:

1. From the sizes of tumour
2. From a histological structure
3. From age of patients
4. From a sex

№10. Metastasis „Krukenbergis” this the metastasis in:

1. Lymphonodes of neck
2. In a umbilicus
3. In ovaries
4. In pararectal space

Right answers: 1)4; 2)3; 3)1; 4)1; 5)2; 6)1; 7)1; 8)2; 9)2; 10)3

4. MATERIALS FOR AUDIENCE INDEPENDENT WORK

4.1. List of educational practical tasks which must be mastered on practical employment

- examination and palpation of patients
- palpation of axillar and neck lymphonodes
- rectal research
- to know as gastroscopy is conducted
- to be able to read sciagrams at roentgenoscopy
- ultrasonic research
- to work out a plan of treatment of patient with the cancer of stomach

4.2. Professional algorithms in relation to the capture by skills and abilities.

Task:

1. To conduct the examination of patient with suspicion on the cancer of stomach

Note: to pay attention to the common state patient, features at palpation of stomach, presence of megascopic lymphonoduss.

2. To take part in the endoscopical inspection of patient (gastroscopys)

Note: To pay attention to the state of mucus stomach

3. To read the sciagram of stomach.

Note: to pay attention to the form of organ, presence and amount of folds, evacuation of contrast .

4.3. Educational tasks and tests of the III level, which complement independent work on practical employment.

Task №1

Patient of H. 41 year, appealed to the doctor with complaints about a periodic weakness, decline of appetite, insignificant weighloss. Periodic vomiting (once in two - three days). Such state feels during 3-4 monthes. Objectively: the common state is satisfactory, at palpation of stomach concerns insignificant painfulness in an epigastrium, tumours in this region are not present. At the rectal inspection infiltrate is achieved , higher prostate gland, not painfull. At a gastroscopy found out infiltration of stomach walls, compression of mucus shell. Biopsy are cancers cells are not found.

Question:

1. Variants of previous diagnosis
2. What are needed to the inspection for clarification of diagnosis?
3. Plan of treatment.

Standards of answers

1. Cancer of stomach, infiltrative form with a metastasis in the pararectal fat of clinical group IV
2. Roentgenoscopy of stomach, punction of induration in a small pelvis.
3. Palliative gastrectomy palliative polychemiotherapy.

№2. A patient 49 years is ill on gastritis, and the last 6-7 years – ulcerous disease of stomach. The last months sharply pains became sharp which do not disappear at the use of diet, as this was before. At roentgenoscopy of stomach there was the found caluos ulcer of forestomach. Size is 1x1 cm.. There is suspicion about possibility of malignization of ulcer.

1. About what complication it is possible to think at appearance of the such expressed pain syndrome.
2. As to define a question about the regeneration of ulcer, if there is no possibility to execute a gastroscopy with a biopsy.

№3. At a patient 65 years there are moderate pains in a epygastral area, appetite is stored. By a district internist appointed roentgenoscopy, which revealed a tumour of body of stomach. During operation and the revision of stomach a tumour does not concerne by sight.

1. Whether all researches were done for clarification of diagnosis.

№4. At a patient 48 years found tumour of antral part of stomach without violation of communicating. At biopsy is adenocarcinoma. A surgeon recommended to the patient to execute the resection $\frac{3}{4}$ of stomach by Bilrot-II. As your plan of treatment?

№5. A patient is 55 years the executed operation of subtotal resection of stomach on an occasion a tumour 6x9 cm, that growth serosa. Remote groups of lymphonoduss on small curvature and single at a region epiploon. On 12 days taken out the stitches of healing by primary tensios, evacuation from the stomach is good.

1. Subsequent plan of treatment.
2. Who must treat a patient after.
3. What of disability will be given to this patient?.

№6. At a patient 53 years the cancer of stomach developed on a background a chronic gastric ulcer. At laparotomy found tumour of small curvature that does not growth in surrounding organs. In an omentulum lymphonoduss are megascopic to the esophagus, higher on motion of aorta. Metastases in a liver are not found.

1. Operating tactic of surgeon.
2. Subsequent plan of treatment.

№7. At a patient 60 years the found cancer of antral part of stomach with stenosis of pilory. Executed laparotomy, a tumour growth in a pancreas and hepatic ligament. What a palliative purpose of gastroenterostomy.

1. Subsequent plan of treatment
2. Whether necessary radial therapy.

№8. A patient is 54 years after the inspection made operation cancer of stomach, saucer similar carcinoma by sizes 8x8 cm that grows in in a transvers colon, tail of pancreas, spleen. Metastases concerne in the lymphonoduss of I - II order. In a liver and in the another organs etastases do not concerne.

1. Diagnosis by system of TNM and clinical group
2. Tactic of surgeon.

№9. Patient 58 years hospitalized in clinic with complaints on a stomach-ache, weakness, absence of appetite.

During examination common state satisfactory, palpating tenderness tumour education not mobile palpate in an epigastrium moderato. Lymphonoduss not are megascopic. At the rectal inspection without pathology.

1. Diagnose previous
2. What is it necessary for clarification of diagnosis?
3. What treatment will be needful in this case?

№10. During examination of patient 58 years it is established, that after the reception of meal sense of pressure appears in a epygastral area, for liberation from what he causes vomit. Less in weight 5-10 kg. At a physical examination are turgor of the skin is sick, tumor concerns in the projection of stomach. Diagnose previous:

1. Sharpening of ulcerous disease
2. Sicatris-ulcerous stenosis of pylorus of stomach
3. Food poisoning
4. Cancer of initial department of stomach
5. Stenosis of initial department of stomach of not clearing genesis.

№11. At the review of sick 40 years, that is directed to the oncologist with the diagnosis of "CAnker of stomach"- the compression is discovered in the umbilical region and increase of stomach in sizes. Which to the inspection it is needed to execute for clarification of stage of illness:

1. Surveying roentgenoscopy of abdominal region
2. Ultrasonic research of abdominal region
3. Laparoscopy

5. MATERIALS OF AFTERAUDITORY INDEPENDENT WORK.

1: Study of indexes of morbidity on the cancer of stomach and percent of radical treatment of these patients in the Poltava region.

2: Study of dependence of the neglected forms of cancer of stomach from age and sex of patients.

Methodical instructions is revised and ratified on meeting of department of oncology

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