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Guidelines for conducting a practical lesson with 6th year students of the Faculty of Medicine on the topic:

DIFFERENTIAL DIAGNOSIS OF COMPLICATIONS OF ULCER DISEASE, DIFFERENTIATED TREATMENT

(CLASS DURATION 4 HOURS)

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Purpose of the lesson:

in the process of clinical analysis of the patient to improve the level (quality) of knowledge and skills of students in the diagnosis (differential diagnosis), the formulation of the diagnosis of complications of peptic ulcer, to develop a differentiated approach to the treatment of peptic ulcer and its complications.

Motivation for the relevance of the topic:

Peptic ulcer is one of the most common diseases of the internal organs. According to clinicians, its prevalence among the adult population is currently 7-10%. This disease affects people at the most active, creative age, often causing temporary and sometimes permanent disability. In urban residents, this disease is more common than in rural areas. Men suffer from peptic ulcer 2-3 times more often than women, which is especially noticeable in the group of young patients. Every year in our country under dispensary supervision there are more than 1 million patients with peptic ulcer, every second undergoes inpatient treatment. The frequency of complications of peptic ulcer leading to long-term and permanent disability, and sometimes death, ranges from 26.5 to 42.3%. In this regard, peptic ulcer disease is one of the important medical and social problems of internal medicine.

In uncomplicated cases, peptic ulcer usually occurs with alternating periods of exacerbation of the disease (duration, on average, from 3-4 to 6-8 weeks) and remission (lasting from several months to several years). Under the influence of adverse factors (for example, physical stress, alcohol abuse, taking ulcerogenic drugs, etc.), complications may develop. These include bleeding, perforation and penetration of the ulcer, the development of perivisceritis, the formation of cicatricial and ulcerative pyloric stenosis, the occurrence of malignancy of the ulcer.

Determining the level of preparation of students:

The second and third levels of knowledge: methods of control - a written survey (20 min). Students should know the main issues of etiology, pathogenesis, clinic and diagnosis of peptic ulcer, differential diagnostic differences between symptomatic gastroduodenal ulcers and peptic ulcer, clinic and diagnosis of complications of peptic ulcer, the main groups of antiulcer drugs, their mechanisms of action; students should be able to - possess propaedeutic skills, independently identify the main pathological syndromes - pain, dyspeptic, astheno-neurotic, make a preliminary diagnosis according to the accepted classification, determine the required amount of research and be able to interpret the data of additional research methods - laboratory (general blood count, b / x blood test, stool for occult blood, analysis of fractional gastric sounding, intragastric pH-metry, biopsy results, etc.) and instrumental (ultrasound of internal organs, fluoroscopy of the stomach, FGDS with the determination of Hp, plain radiography of the abdominal organs, etc.) .

Report of student curators in the ward: when reporting the patient, students should pay special attention to the following manifestations of complications of peptic ulcer.

Ulcerative bleeding is observed in 15-20% of patients with peptic ulcer, more often with gastric localization of ulcers. The mechanism of development of bleeding is that in the area of the ulcer, the vessel is damaged, and it begins to bleed. If a small vessel is damaged, then the bleeding is very insignificant, without clinical manifestations and is detected only with the help of the Gregersen reaction.

Explicit bleeding from an ulcer is characterized by three main syndromes:

- bloody vomiting;
- tarry stools;
- Symptoms of acute blood loss.

Hematemesis is most typical for bleeding from a stomach ulcer and is much less common with a duodenal ulcer. In the latter case, hematemesis is observed because the contents of the duodenum are thrown with blood into the stomach. Gastric contents during hematemesis usually look like coffee grounds (dark brown), which is due to the conversion of hemoglobin of the outflowing blood under the influence of hydrochloric acid into hydrochloric acid hematin, which has a dark color. Hematemesis occurs shortly after bleeding, and sometimes some time after it. If bleeding develops very quickly and the amount of blood poured out is large, vomiting of scarlet blood is possible.

Tar-like stools, melena - the most important sign of bleeding from a duodenal ulcer, usually observed after the loss of more than 80-200 ml of blood.

Melena is characterized by a liquid or mushy consistency of feces and its black color. Under the influence of the intestinal flora, iron sulfide, which is black in color, is formed from the hemoglobin of the outflowing blood. A typical stool with melena is black as tar, unformed, shiny, sticky. It is necessary to distinguish melena from pseudomelena, i.e. black shaped stool associated with the intake of blueberries, bismuth, bird cherry, blackberries, iron preparations. Unlike true melena, with pseudomelena, the stool has a normal consistency and shape.

It must be emphasized that when bleeding from a duodenal ulcer, a black tarry stool does not appear at the time of bleeding, but several hours or even a day after it. Melena is observed after a single blood loss, usually for another 3-5 days.

A characteristic sign of ulcerative bleeding is the sudden disappearance of pain syndrome - Bergman's symptom.

Clinical manifestations of acute blood loss depend on the rate and volume of bleeding, as well as on the age of the patient and comorbidities, especially cardiovascular. Bleeding, not exceeding 500 ml, usually does not cause vivid symptoms, if there are no significant violations of the body's compensatory capabilities. A slight decrease in the volume of circulating blood is quickly compensated by the inclusion of deposited blood in the bloodstream. In acute massive blood loss, when within a short time, measured in minutes or hours, the patient loses more than 1500 ml of blood, or about 25% of the BCC, a collapse develops, and with a further increase in blood loss, hypovolemic shock develops. With heavy bleeding, kidney and liver failure often develops. The first formidable symptom of developing renal failure is urine output below 20 ml/h.According to the severity of bleeding are divided into four degrees: mild, moderate, severe and extremely severe. To determine the degree of blood loss, it is now customary to focus mainly on the BCC.With a mild degree of blood loss, the BCC deficit does not exceed 20%; the patient's condition remains satisfactory. There may be weakness, dizziness, moderate tachycardia, hemoglobin content above 100 g/l, hematocrit more than 0.30.With moderate blood loss, the BCC deficit ranges from 20-30%; there are clear clinical signs of bleeding. The patient's condition is moderate, there is general weakness, pulse up to 100 per minute, moderate hypotension, hemoglobin content 100-70 g/l, hematocrit 0.30-0.25.Severe blood loss is characterized by a BCC deficit of 30 to 40%. The patient's condition is grave. Pulse 100-150 per minute, systolic blood pressure drops to 60 mm Hg, hemoglobin content 70-50 g/l, hematocrit less than 0.25.

With an extremely severe degree, blood loss is more than 40% of the BCC. The patient's condition is extremely serious, consciousness is absent, blood pressure and pulse are not detected, hemoglobin is below 50 g/l.

Perforation (perforation) of the ulcer occurs in 5-15% of patients with peptic ulcer, more often in men. Physical overstrain, alcohol intake, overeating predispose to its development. Sometimes perforation occurs suddenly, against the background of an asymptomatic course of peptic ulcer.Perforation of the ulcer most often occurs typically in the free abdominal cavity. Covered perforation of the ulcer, perforation into the retroperitoneal tissue is less common.

In a typical course of perforation, a classic symptom complex is observed: acute “dagger” pain in the epigastric region, tension in the muscles of the anterior abdominal wall, symptoms of pneumoperitoneum, and then perforated peritonitis, rapidly increasing deterioration in the condition of patients.

Atypical forms of perforations of ulcers are observed with a decrease in the reactivity of the organism and in cases of so-called covered perforations.

With a decrease in the reactivity of the organism in debilitated patients and patients of senile age, the disease proceeds without a pronounced general and local reaction. Despite perforation into the free abdominal cavity, tension in the muscles of the anterior abdominal wall, pain on palpation of the abdomen, and the Shchetkin-Blumberg symptom are often mild or almost absent.

Covered perforation occurs when adhesions and adhesions develop around the ulcer, which limit the area of \u200b\u200bthe abdominal cavity. The peculiarity of the course of a covered perforation of a gastroduodenal ulcer is that after the appearance of a characteristic clinical picture of perforation, within the next minutes or 1-2 hours, the sharpest pains and muscle tension gradually decrease. Local soreness and slight stiffness of the muscles of the anterior abdominal wall in the area of the ulcer are retained for a longer time. In the future, an adhesive process is formed or an encysted abscess is formed in the abdominal cavity.

Penetration. Penetration is understood as the spread of an ulcer beyond the wall of the stomach or duodenum into the surrounding tissues and organs.Ulcers of the posterior and lateral walls of the duodenal bulb and postbulbar ulcers more often penetrate into the head of the pancreas, into the biliary tract, liver, hepatoduodenal ligament, into the large intestine and its mesentery, stomach ulcers into the lesser omentum and into the body of the pancreas. The clinical picture of penetration depends on the depth of penetration and the organ involved in the process. If the ulcer reaches the serous membrane of the stomach or duodenum, but does not come into contact with other organs, the clinical picture differs little from the uncomplicated form of peptic ulcer. When penetrating into other organs, the course of the disease becomes more severe: the pain syndrome increases, the pain becomes almost constant, sometimes very intense, loses its natural connection with food intake, and does not decrease from taking antacids. There are signs of perivisceritis, inflammatory infiltration in the penetration zone (subfebrile temperature, leukocytosis, increased ESR). In the area of the pathological focus, severe palpation pain is often determined and it is possible to determine the inflammatory infiltrate. In addition, there are symptoms characteristic of diseases of the organs where penetration has occurred. The presence of ulcer penetration is confirmed radiographically and endoscopically.Pyloric stenosis is usually formed after scarring of ulcers located in the pyloric canal or the initial part of the duodenum.There are organic stenosis due to post-ulcer cicatricial changes, and functional narrowing of the pyloroduodenal zone associated with edema and spasms. Unlike organic functional stenosis is observed only during the period of exacerbation of peptic ulcer. The reason for the violation of the patency of the pyloric canal or the initial part of the duodenum in these cases may be a periulcerous infiltrate and spastic contractions of the pylorus. The clinical picture of the functional narrowing does not differ from that in organic stenosis, but unlike the latter, it disappears as the ulcer heals and the inflammatory edema disappears. In the remission phase, a slight cicatricial deformity may persist without compromising the evacuation function of the stomach.Organic pylorobulbar stenosis is accompanied by a constant violation of the evacuation activity of the stomach and duodenum. The clinical picture of stenosis depends on the degree of its severity. There are compensatory, subcompensated and decompensated stenosis.

With compensated pyloroduodenal stenosis, a moderate narrowing is noted, however, due to hypertrophy of the muscles of the stomach and its increased motor activity, the evacuation of food from the stomach occurs at the usual time. The general condition of the patient is not disturbed, although often in these cases there is a feeling of heaviness in the epigastric region after eating, belching sour, vomiting, which brings relief.

With subcompensated stenosis, intense pain and a feeling of fullness after taking a small amount of food predominate, belching is characteristic, profuse vomiting, which brings relief; vomit often contains food eaten the day before. When viewed at this stage, often according to the location of the stomach, a “splash noise” is determined on an empty stomach or a few hours after eating.With decompensated pyloroduodenal stenosis, vomiting often occurs, accompanied by progressive exhaustion, dehydration. The condition of patients, especially with prolonged stenosis, is severe. The skin is dry, flabby, in the epigastric region, through the thinned integument and the abdominal wall, the contours of the distended stomach often appear. Even light shocks on the anterior abdominal wall in the stomach area cause a clear "splash noise".Gastric ulcer malignancy is not as common a complication of gastric ulcers as previously thought. Long-term endoscopic observations made it possible to draw a conclusion. That the development of cancer from an ulcer, if it occurs, is rare, the primary ulcerative form of gastric cancer is more common. According to the clinical picture, the primary ulcerative form of gastric cancer does not differ from a chronic ulcer of the same localization in peptic ulcer. The primary ulcerative form of gastric cancer for a number of years can proceed without a generalization of the process with periods of relapse and healing of the ulcer; a good appetite and a general satisfactory condition of the patient remain for a long time. During the formation of a malignant ulcer, patients usually complain of "hungry", nocturnal pain in the epigastrium, which subsides after eating and alkalis. Clinically, it is sometimes possible to note a change in the course of peptic ulcer with a loss of periodicity and seasonality of exacerbations. Blood tests reveal anemia, elevated ESR. The final conclusion is made by histological examination of biopsy specimens taken from various parts of the ulcer.

Perivisceritis refers to an adhesive process that develops with a peptic ulcer between the stomach or duodenum and neighboring organs. Perivisceritis is characterized by more intense pain, aggravated after a heavy meal, with physical exertion and shaking of the body, sometimes with fever and accelerated ESR. X-ray and endoscopically, deformations and restriction of mobility of the stomach and duodenum are detected.

Additional research. A clinical blood test with an uncomplicated course most often remains unchanged. Sometimes there is a slight increase in hemoglobin and red blood cells, but anemia may also be detected, indicating overt or hidden bleeding. Leukocytosis and accelerated ESR occur in complicated forms of peptic ulcer (with ulcer penetration, severe perivisceritis). Fecal occult blood test - negative Gregerson test. The study of the acid-forming function of the stomach is carried out using fractional gastric sounding or pH-metry (in recent years - using daily monitoring of intragastric pH). With ulcers of the duodenum and pyloric canal, increased rates of acid production are usually noted, with ulcers of the body of the stomach and subcardiac department - normal or reduced. Detection and confirmation of histamine-resistant achlorhydria almost always excludes the diagnosis of duodenal ulcer and casts doubt on the benign nature of the gastric ulcer. An X-ray examination reveals a direct sign of peptic ulcer - a “niche” on the contour or on the relief of the mucous membrane and indirect signs of the disease (local circular spasm of muscle fibers on the opposite wall of the stomach in relation to the ulcer in the form of a “pointing finger”, convergence of the folds of the mucous membrane to " niche”, cicatricial and ulcerative deformity of the stomach and duodenal bulb, hypersecretion on an empty stomach, disorders of gastroduodenal motility). When the ulcer is localized in the stomach, a biopsy is performed, followed by a histological examination of the material obtained. Investigation of the presence of HP in the gastric mucosa by urease, morphological or breath test.

Preliminary diagnosis: based on the leading complaints, anamnesis and clinical manifestations, as well as indicators of additional studies, a preliminary diagnosis is made.

differential diagnosis. Peptic ulcer must be differentiated from symptomatic gastric and duodenal ulcers, the pathogenesis of which is associated with certain underlying diseases or specific etiological factors - stress, drug, endocrine ulcers, as well as gastric and duodenal ulcers that develop in certain diseases of the internal organs (chronic pancreatitis, chronic nonspecific lung diseases, widespread atherosclerosis, Crohn's disease). Symptomatic gastroduodenal ulcers often develop acutely, sometimes manifesting as sudden gastrointestinal bleeding or perforation of ulcers, occur with atypical manifestations (blurred picture of exacerbation, lack of seasonality and periodicity).

If ulcerative lesions are found in the stomach, it is necessary to carry out differential diagnosis between benign ulcers, malignancy of the ulcer and the primary ulcerative form of gastric cancer (very large ulcers, localization of the ulcer on the greater curvature of the stomach, the presence of an increase in ESR and histamine-resistant achlorhydria). X-ray and endoscopically reveal the irregular shape of the ulcer, its uneven and bumpy edges, the rigidity of the stomach wall at the site of ulceration. The final conclusion about the nature of the ulcerative lesion is made after a histological examination of ulcer biopsy specimens.Clinical diagnosis: according to the accepted classification, indicating the localization of the ulcer, the phase and nature of the course, disorders of the secretory and motor-evacuation functions of the stomach, complications.

Conducting classes in a thematic classroom. Analysis of the features of etiology, pathogenesis, clinic and treatment of a particular patient. Indicate the main methods of drug and non-drug effects, the main groups of antiulcer drugs and their mechanisms of action, the main indications and contraindications for use.The final part of the lesson: control of the acquired knowledge - test control, solving situational problems without possible options for correct answers.Summary.