CLINICAL ANATOMY AND MULTIDISCIPLINARY CARE ON MULTIDISCIPLINARY PATIENT (CLINICAL CASE)

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The article presents a clinical case of a 39-year-old patient with peptic ulcer of the pyloric and duodenal bulb complicated by perforation, intra-abdominal abscess and diffuse peritonitis after surgery. This pathology also led to severe disorders of the functioning of the body due to metabolic and neurological complications.

Keywords: *stomach ulcer, duodenal ulcer, complications, disorders.*

КЛИНИЧЕСКАЯ АНАТОМИЯ И МНОГОПРОФИЛЬНОЕ ЛЕЧЕНИЕ МНОГОПРОФИЛЬНОГО ПАЦИЕНТА (КЛИНИЧЕСКИЙ СЛУЧАЙ)

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Статья представляет клинический случай 39-летней пациентки с язвенной болезнью пилорического отдела желудка и луковицы двенадцатиперстной кишки, осложненной перфорацией, внутрибрющным абсцессом и диффузным перитонитом после проведенного оперативного вмешательства. Данная патология также привела к тяжелым нарушениям функционирования организма из-за метаболических и неврологических осложнений.

Ключевые слова: *язва желудка, язва 12-перстной кишки, осложнения, нарушения.*

Introduction. The stomach has a cardiac part, a fundus, a body and a pyloric part. The digestive sac corresponds to the cardiac part, the fundus and the body of the stomach; the excretory canal corresponds to the pyloric department [4]. The pyloric part and the bulb of the duodenum are the most vulnerable to the development of the ulcerative process, the complications of which are perforation and stenosis [1]. About 50% of patients in St. Petersburg, according to the Scientific and Methodological Department of the I.I .Janelidze Research Institute of Joint Venture, are admitted to hospitals in the city 6 hours after perforation. Therefore, the issue of timely verification of the diagnosis is very relevant [3]. Surgical treatment of pyloric and duodenal ulcers in the long-term period is accompanied by recurrence of ulceration in 9.7% of patients [2].

Materials and methods. The material of the study was the medical history of a patient aged 39 years.

The study analyzed data from the following research methods: X-ray, ultrasound, esophagogastroendoscopic and laboratory diagnostics.

Results. A 39-year-old woman, considers herself ill for a considerable time. The patient has a history of gastric ulcer and duodenal bulb, complicated by perforation and intra-abdominal abscess. In 2016, she was operated on for an intra-abdominal abscess leading to a purulent peritonitis, complicated by a pyloric stenosis after an anterior colonic gastroenteroanastomosis with Brown method. Cicatricial deformation of the pyloroduodenal zone with signs of decompensated stenosis caused gastroesophageal reflux disease with total fibrinous candidiasis esophagitis of the 2nd stage. The patient also has a history of a demyelinating disease. After her surgery, she had been treated at the district polyclinic for 6 years.

In May 2022, the patient was diagnosed with chronic hepatitis with a negative result for HBsAg and anti HCV and thus was directed to the gastroenterology department in the regional hospital. Chronic hepatitis had c signs of transformation into fibrosis with compensated portal hypertension with ascites, Concomitant diseases were identified: demyelinating disease of the central nervous system (epileptic seizures) and chronic iron deficiency anemia of mild severity.

Physical examination showed a satisfactory general state, an IBM of 13,8, a stable temperature of 36.8, a BP of 90/60 and a SpO2 of 98%. The patient breathed hardly, but no wheezing was detected during auscultation. During abdominal palpation, a 3 cm enlargement of the liver was detected.

The ECGs on the other hand showed a sinusoid rhythm with a heart rate of 90 beats per minute. Moving to the diagnostic methods, the ultrasound of the abdominal organs and pleural sinuses, showed a diffuse dystrophy of the liver with a high echogenicity in the fourth segment under the portal vein, an enlargement of the lymph nodes, a peritoneal fluid (500 ml) under the hepatic lobes and a post operative ventral hernia.

The esophagogastroduodenoscopy revealed a gastroparesis, a grade II of esophageal candidiasis shown as multiple raised lesions (> 2mm) without surrounding edema nor laceration. A Moderate GERD, grade A with an incompetence of the cardia.

The laboratory analysis was made in the following order: biochemistry of the blood, complete normal blood count, urine analysis with the following changes observed in the results:

A hypokalemia (2,88 mmol/L), a low protein (58 g/L), a low albumin (29 g/L) a drop of erythrocytes (3.71*10*12/L) and a hemoglobin level (52 g/L).

HIV, Syphilis and Hepatitis C were not detected.

After 12 days of treatment, the patient was discharged voluntarily since she didn’t want to pursue the remaining observation period, with a recommendation for a neurologist, surgent and a physician's consultation.

She had a prescription of Esomeprazole 40 mg two times a day in the morning after food intake and at night for one month then 40 mg for a year in the mornings, NystatinA1 (100) * 4 times a day for 10 days, Sorbifer Durules 2 times a day for one month and alendronic acid.

The gastroenterologist also prescribed a general blood analysis within a month.

The approximative proposed diagnosis of the multidisciplinary patient were : peptic ulcer, perforating ulcer of the duodenal bulb, a diffuse purulent peritonitis due to the intra-abdominal abscess in 2016, pyloric stenosis as a post operative complication, a cicatricial deformity of the pyloroduodenal zone with signs of decompensated stenosis., a gastroesophageal reflux disease with total fibrinous stage 2 candida esophagitis, chronic enteritis, chronic hepatitis with signs of transformation into fibrosis, a compensated portal hypertension with ascites, demyelinating disease of the CNS (Epilepsy convulsions) and a chronic iron deficiency anemia of mild stage.

In June 2022, she was hospitalized to the department of therapy medicine of the regional hospital Pskov with a history of progressive extreme fatigue, shortness of breath sometimes followed by chest pain, headache, and a loss of appetite.

These symptoms were responsible for activity limitation and inability to fulfil daily tasks.

The biochemistry laboratory tests revealed a conserved hypokalemia (3.34 mmol/ L), albumin (32 g/L), high AST, ALP and GGT rates reaching (86, 61 and 288) mmol/L and a low ferritin level.

During her stay in the department of internal medicine, the patient was recommended to follow up the result of the esophageal biopsy within 14 days. A proton-pomp inhibitor Rabeprazole was prescribed in the morning daily, with a dose of Carbamazepine and vitamin D, accompanied with a control of hemoglobin levels, a surgical consultation to determine the future tactics of treatment. An esophagogastroduodenoscopy was prescribed to be done within a year. The patient was also advised to consult a gastroenterologist and a physician if available.

The last ultrasound showed signs of diffuse changes in the liver parenchyma, a liver of chronic hepatopathy with signs of portal hypertension and a transformation in fibrosis. A ventral hernia without strangulation and ascites are also detected.

The X-ray of the stomach showed a cicatricial deformity of the pyloroduodenal zone with signs of decompensated stenosis, x-ray signs of total esophagitis insufficiency of the cardia, gastroesophageal reflux, enteritis.

The esophagogastroendoscopy by VIDEOENDOSCOPE ‘SonoScape’ SS/663 shows a cicatrized deformation of the pylorus with a sign of stenosis, a deformation of the antral part of the stomach, total fibrinoid esophagitis, an insufficiency of the cardia, a surgical consultation was advised.

Within 5 days the doctors of the internal medicine department noticed an amelioration of the general state of the patient and a remission of her erythrocyte count and hemoglobin level therefore was discharged.

Discussion. The state of our multidisciplinary patient is taken into consideration under different etiologies, being analyzed through diagnostic methods. Starting with her GIT status, an ultrasound and a contrast radiography were performed to identify the ultimate causes of her malabsorption problems.

Our case shows that one of the complications of gastrointestinal surgery with Brown anastomosis method can cause metabolic disorders. Gastrointestinal surgery can alter the absorption and utilization of nutrients, leading to deficiencies in essential vitamins and minerals. Common deficiencies include vitamin B12, iron, calcium, and vitamin D. These deficiencies can lead to a range of symptoms, including anemia, fatigue, and bone loss. Following that, we can explain the stage of osteoporosis that has been diagnosed through an Osteodensitometry, showing an advanced level of osteoporosis, with high fracture rate, especially in the lumbar area on the Level of L1-L4, with a T criterion =2.6 SD.

The malnutrition and malabsorption states are the causes of our underweight patient (BMI= 13.8). The hypokalemia was the main the epileptic seizures (alteration the excitability of neurons).

Conclusions

1. Patients with gastric and duodenal ulcers are at risk of complications requiring surgical treatment, as well as the development of metabolic and neurological disorders.

2.Patients suffering from a chronic iron deficiency anemia, with a GIT surgical history, are more likely to develop metabolic syndromes, leading to not only secondary neurological problems but, also osteoporotic states.

3. Even though Iron deficiency anemias may seem ordinary it can hide other etiologies.

4. It is obligatory for the multidisciplinary staff to monitor the progress of the patient and adjust the care plan as necessary.

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