G.Pyatikop [1]
R.Moskalenko [1]
O.Kravets [2]
V.Bratushka [2]
G.Tkach [1]

[1] Sumy State University
[2] Sumy regional hospital

Key words: Dieulafoy's lesion, morphology, gastric bleeding, clinical case.

Надійшла: 11.09.2012
Прийнята: 25.09.2012

UDC 616.33-005.1

MORPHOLOGICAL FEATURES OF DIEULAFOY'S LESION. CLINICAL CASE

Summary. The paper highlights a rare Dieulafoy's lesion. At autopsy study found a slight defect of the gastric mucosa in the upper part of the greater curvature, in the center of which there was a thrombotic vessel. Histological examination revealed the plot of erosive mucous membrane, occurrence of fibrinoid necrosis, the artery with uneven walls and thickness defect, dysplastic vessels under the muscle plate of mucosa, lymphocytic infiltration in the surrounding areas of the mucosa.
Морфологія. – 2012. – Т. VI, № 3. – С. 84-86.

П'ятикоп Г.І., Москаленко Р.А., Кравець О.В., Братушка В.О., Ткач Г.Ф. Морфологічні особливості хвороби Делафуа. Клінічний випадок.
Резюме. У роботі висвітлюється рідкісний випадок хвороби Делафуа. При аутопсійному дослідженні було знайдено незначний дефект слизової оболонки шлунка у верхній частині великої кривизни, в центрі якого знаходилася тромбована судина. При гістологічному дослідженні виявлено ділянку ерозування слизової оболонки, явища фібриноїдного некрозу, артерію з стінками нерівної товщини та дефектом, диспластичні судини під м'язевою пластинкою слизової оболонки, лімфоцитарна інфільтрація в прилеглих ділянках слизової оболонки.
Ключові слова: хвороба Делафуа, морфологія, шлункова кровотеча, клінічний випадок.

The problem of acute gastrointestinal bleeding remains one of the most difficult in emergency surgery. At present, the most common cause of bleeding is peptic ulcer disease. At the same time, in 1-26% of cases the causes of gastrointestinal bleeding are other relatively rare diseases (Королев М.П., 2003). One such disease is a Dieulafoy syndrome (G. Dieulafoy), which was first described in 1884 by T.Gallard on the basis of 2 autopsy cases, but became famous in 1898 owing to G. Dieulafoy, who, based on three observations, described in detail and identified this condition as a separate nosological entity. He described the disease as gastrointestinal bleeding from a surface defect of oval or round shape with a diameter of a few millimeters in the background of unchanged mucosa of the proximal part of the stomach, on the bottom of which there is eroded artery without signs of vasculitis. The author called the disease "simple ulceration" and in the medical literature the name Dieulafoy's lesion (DL) entrenched (Кузьмин И.В. и соавт., 2002; Фомин П.Д. и соавт., 2003). In domestic scientific literature DL was first detected at autopsy and described by D.A.Vasylenko and S.L.Mynnyk in 1955.

During the period from 2006 to 2012 at the surgical department of Sumy Regional Hospital 5 patients were observed with this rare disease, which was complicated by the development of gastrointestinal bleeding (3 men and 2 women). The age of patients ranged from 47 to 79 years. The clinical course of the disease was typical. All patients were hospitalized in serious or moderate condition. The severity of the condition was due to the amount of blood loss.

Case presentation

Patient B., 79 years old, hospitalized to the surgical ward of Sumy Regional Hospital in the urgent procedure with a diagnosis of gastro-intestinal bleeding. The disease began acutely as profuse gastrointestinal bleeding. The main complaints were vomiting with blood. Objective: moderate condition due to blood loss. Skin and visible mucous membranes were pale. Hemodynamics was stable. Abdomen was soft, not painful. During gastroscopy bleeding source could not be determined. The patient was prescribed with conservative infusion-transfusion, haemostatic, antiulcer therapy, after which the general condition of the patient improved. Hemorrhagic anemia that had been diagnosed earlier in the disease, easily subjected to correction. Control gastroscopy was prescribed due to the stable state of a patient on the 3 day since her hospitalization. Lasting bleeding was found, but its source was not identified. The patient's condition started to progressively deteriorate. On the next day the stop of cardiovascular activity happened. Resuscitation measures

were unsuccessful. Biological death was ascertained.

Autopsy: stomach distended, filled cavity containing a reddish color with clots in an amount of about 400 ml. Mucosa of the stomach is flat, pale, the upper part of the greater curvature contains eroded artery with signs of thrombosis (fig. 1), which is located in the lumen of the stomach in the form of "volcano."

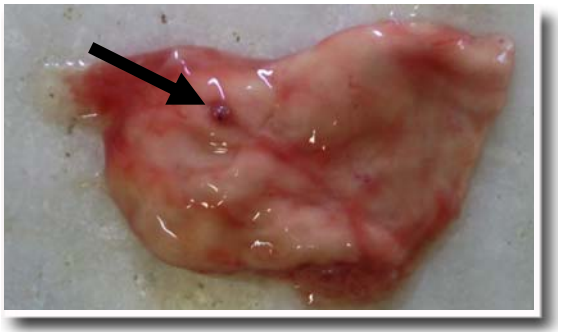

Fig. 1. Erosion artery of gastric with thrombosis (indicated by arrow)

Histological examination of the gastric mucosa tissue found erosive mucosa with fibrinoid necrosis and major arteries at the base of the defect, dysplastic vessels under the muscle plate mucosa and lymphocytic infiltration in the surrounding areas of the mucosa. Signs of vasculitis and dystrophic calcification in the vessel were absent (fig. 2).

Main diagnosis – a malformation of blood vessels of the stomach (Dieulafoy's lesion). Complications - gastrointestinal bleeding. Acute hemorrhagic anemia. Acute cardiovascular insufficiency. Pulmonary edema.

Concomitant diseases were chronic ischemic heart disease, atherosclerosis of the aorta under atherocalcinosis.

The peculiarity of the described case DL is the presence of atherosclerosis in the aorta and other large vessels, although in the affected artery of the stomach it was missing. Most authors deny the possibility of atherosclerotic vascular lesions of the stomach as a cause of DL (Фомин П.Д. и соавт., 2003; Sone Y. et al., 2005).

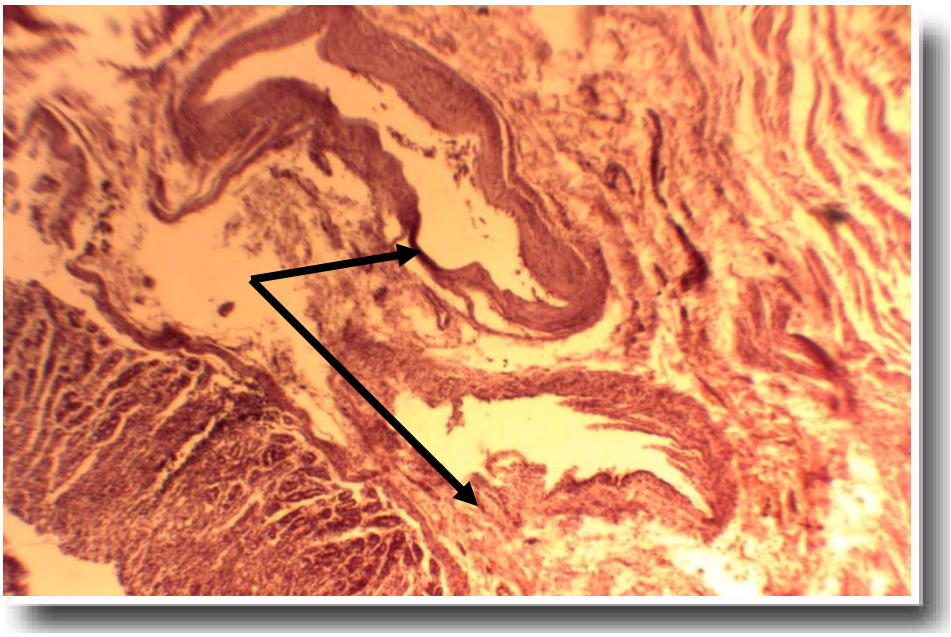

Fig. 2. Gastric mucosa with dysplastic vessels (indicated by arrows). Stained by hematoxylin-eosin. ×200.

So Dieulafoy disease causes gastric bleeding in 0,4-1% of patients (Sone Y. et al., 2005). The basis of Dieulafoy disease is wall breaking of extended, meandering submucosal artery with development of profuse bleeding due to local ischemia mucosa. Blood, clots in the stomach, and small size make HD endoscopic diagnosis difficult.

Repeated endoscopic research, availability of modern equipment, and trained personnel make it possible to avoid diagnostic errors and provide qualified medical care with favorable results.

Literature

Болезнь Дьелафуа: особенности собственного наблюдения и обзор литературы / И. В. Кузьмин, И. В. Булычев, Н. П. Забазный [и др.] // Новый хир. арх. – 2002. – Т.1, №6. – С. 10-18.

Королев М. П. Синдром Дьелафуа / М. П. Королев // Актуальные проблемы диагностики,

лечения и профилактики заболеваний. Труды Мариинской больницы. Выпуск II. К 200-летию Мариинской больницы. – С-Пб, 2003. – С.138-152.

Фомин П. Д. Диагностика и лечение болезни Дьелафуа / П. Д. Фомин, В. И. Никишаев, С. В. Музыка // Український медичний часопис. – 2003. – Т.2, №3-4. – С.116-120.

Endoscopic management and follow up of Dieulafoy lesion in the upper gastrointestinal tract / Y. Sone, T. Kumada, H. Toyoda [et al.] // Endoscopy. – 2005. – Т. 37, №5. – P. 449-453.

Пятикоп Г.И., Москаленко Р.А., Кравец А.В., Братушка В.А., Ткач Г.Ф. Морфологические особености болезни Дьелафуа. Клинический случай.

Резюме. В работе освещается редкий случай болезни Дьелафуа. При аутопсийном исследовании был найден незначительный дефект слизистой оболочки желудка в верхней части большой кривизны, в центре которого находился тромбированый сосуд. При гистологическом исследовании виявлено участок эрозирования слизистой оболочки, явления фибриноидного некроза, в центре эрозии – артерию со стенками неравной толщины и дефектом, диспластический сосуд под мышечной пластинкой слизистой оболочки, лимфоцитарную инфильтрацию в прилежащих участках слизистой оболочки.

Ключевые слова: болезнь Дьелафуа, морфология, желудочное кровотечение, клинический случай.