

Bleeding after gastric bypass surgery. The possibility of using balloon enteroscopy in the postoperative period

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Abstract

One of the possible complications after bariatric surgery is bleeding. within the majority of cases bleeding within the later stages of the postoperative period are intraluminal, with clinical manifestations of high gastrointestinal bleeding. Among all bariatric procedures, the event of this complication is more common after Roux-en-Y gastric bypass. Upper endoscopy is that the diagnostic and treatment method of choice, but only bleeding within the gastric pouch or within the gastroenteroanastomosis may be stopped during this way.

If localization of bleeding is within the remnant stomach or duodenum and little intestine, it's necessary to use more advanced endoscopic procedures. Male patient, 44 years old with BMI 43 kg/m² and comorbidities (Diabetes Mellitus type 2, decompensated in patient receiving hypoglycemic drugs), was undergone laparoscopic Roux-en-Y gastric bypass in October 2014. During the year %EWL was 81%, there was compensation of diabetes without medication (HbA1 4.9%). In January 2015 he was hospitalized in an exceedingly clinic in St. Petersburg with signs of upper gastrointestinal bleeding. He includes a history of melena during the last 5 days with an episode of syncope within the hospital day. Hemoglobin was 88 g/l. Upper endoscopy and colonoscopy were performed without identification of source of bleeding. Drug therapy was conducted. some days later the patient was transferred to our hospital with no signs of ongoing bleeding. Balloon-assisted enteroscopy was performed. peptic ulceration with no signs of bleeding was visualized. Endoscopic hemostasis wasn't needed. The patient was discharged the following day. Course of anti-ulcer therapy performed.

During follow-up there was no recurrence of bleeding. Conclusions. the employment of a balloon-assisted enteroscopy is feasible to spot the unidentified sources of bleeding by upper endoscopy. This method allows viewing distal bowel and every one parts excluded of gastrointestinal digestion. It also allows performing therapeutic measures if necessary. Patient S, aged 44, underwent laparoscopic RYGB in one in all Saint Petersburg clinics in October 2014. At baseline his BMI was 43 kg/m² and he had type 2 diabetes, taking oral antihyperglycemic medications. At one year follow-up postoperatively their EWL was 81%. He had compensated type 2 diabetes (HbA1 4.9%), no therapy needed. On 23.01.2016 the patient was brought by ambulance to 1 of city surgical clinics with gastrointestinal

bleeding, complaining of weakness, dizziness and fainting episode after defecation. For the previous week he occasionally had had black stool but failed to concentrate thereto. The patient presented with hemoglobin 88 g/l, erythrocyte count 2.81×10^{12} and hematocrit rate 25.3%. Upper endoscopy showed insignificant anastomosis without signs of bleeding or stenosis.

On complete rectal colonoscopy pale membrane and impaired vascular pattern of the bowel were seen. Abnormal lesions weren't revealed. Endoscopic examination showed signs of colonic mucosal anemia and internal hemorrhoids without exacerbation. within the hospital the patient was administered haemostatic and gastroprotective therapy in addition as blood component transfusion. There was no evidence of any persisting bleeding. The condition of the patient was stabilized and on 29.01.2016 he was transferred to Nikiforov Russian Center of Emergency and Radiation Medicine to verify the source of bleeding. On 2.02.2016 under anaesthesia, enteroscopy was applied with the utilization of Olympus SIF-Q180. The evaluation showed the stomach pouch to be of small size, well insufflated by air and having pink mucosa. Gastroenteroanastomosis proved to be elastic, easily passable. Alimentary intestinal loop demonstrated no abnormality.

At the gap of over 1 m from gastroenteroanastomosis, side-to-side enteroenteroanastomosis was easily passable with no signs of obstruction. Distal 2.5 m deep evaluation of the tiny intestine revealed no abnormality. Proximal evaluation of the tiny intestine, duodenum and unchanged remnant of the stomach was performed. On the anterior wall of the duodenal bulb, 1.0 cm cicatrizing ulcer with none signs of bleeding was found. Next day the patient was discharged and his condition was satisfactory. Gastroenterologist follow-up was recommended. Antiulcer therapy was administered. During follow-up period there was no recurrence of bleeding. Next day the patient was discharged and his condition was satisfactory. Gastroenterologist follow-up was recommended. Antiulcer therapy was administered. During follow-up period there was no recurrence of bleeding. In those patients who underwent RYGB with suspected gastrointestinal bleeding the management approach should be determined first of all counting on the extent of hemodynamic disorder caused by blood loss. open gastrostomy followed by transgastric

endoscopic examination is indicated. Upper endoscopy seems to be quite reasonable at the first stages of diagnosis in patients with signs of gastrointestinal bleedings. When the symptoms of blood loss are rapidly aggravated and upper endoscopy fails to reveal the source of bleeding, urgent laparoscopic or Patients who are difficult to diagnose,

without the signs of persisting or intensive bleeding and with stable hemodynamics should be transferred to hospitals specializing and experienced in bariatric surgery, having adequate equipment and trained personnel to perform advanced endoscopic manipulations. Enteroscopy administrated by an experienced endoscopist enables to verify the source of bleeding within the remnant stomach and biliopancreatic limb, to manage bleeding and avoid highly invasive surgical interventions.

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