PLASMACYTOMA – A RARE CAUSE OF UPPER GASTROINTESTINAL BLEEDING. CASE REPORT

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The study presented a case of 56-year-old male who underwent emergency surgery due to massive upper gastrointestinal bleeding. Prior to surgery, during the last two years the patient was hospitalized and diagnosed several times due to recurrent gastrointestinal bleeding. During the last duodenoscopy a presence of pancreatic tumor infiltrating distal part of the duodenum was shown. The patient was released home – further treatment was postponed until results of histological examination of biopsy were available. Before that the patient was admitted and underwent surgery in our hospital due to massive gastrointestinal bleeding. During surgery no pancreatic or duodenal tumor was found. We revealed a neoplastic tumor of small intestine, localized about 7-10 cm to Treitz’ ligamentum. Resection of the intestine was performed. The postoperative course was uneventful. The histological examination of the specimen revealed an isolated extramedullary plasmacytoma of the small intestine.

Key words: plasmacytoma, intestinal tumor, massive haemorrhagia, intestine resection

The most common cause of upper gastrointestinal bleeding includes duodenal and gastric ulcers, hemorrhagic gastritis, esophageal varices and gastric neoplasms (1, 2). Gastroscopy, which is usually performed during the initial hours after admission to the hospital, enables to establish proper diagnosis, being at the same time a therapeutic procedure (3). Considering some patients, in spite of endoscopic, imaging and angiographic (upper celiacomesenterography) examinations the cause of gastrointestinal bleeding remains unknown (4). In most cases conservative treatment and endoscopic procedures (obliterating and contracting agent injections, vessel clipping, diathermy, thermal and laser probes) are effective (5).

In spite of the greater availability of endoscopic methods in the management of bleeding 3-15% of patients require surgical intervention (6), especially in case of hemorrhage without initial diagnostics. Such operations, due to the severe condition of the patient, hypovolemic shock symptoms, and coexistence of concomitant diseases are often difficult and burdened with the high risk of perioperative complications. Mortality is high amounting to 26% (7).

The study presented a case of a male patient with a two-year history of upper gastrointestinal bleeding. In spite of numerous hospitalizations (gastrology departments) and repeated endoscopic examinations diagnosis was not established. The patient underwent emergency surgery, due to massive hemorrhage, the procedure proved to be therapeutic. Diagnosis was established on the basis of histopathological examination results.

CASE REPORT

J.J. a 56-year old male patient (history number: 2378/61/002/2009) was admitted to the hospital on February 6, 2009 with gastrointestinal bleeding symptoms. During the past two years the patient was hospitalized several times, due to recurrent gastrointestinal tract bleeding. Repeated endoscopic examinations showed no duodenal or gastric abnormalities. Nearly three weeks before admission to our
hospital the patient was discharged from the Department of Gastroenterology CMKP, Oncology Center with the following diagnosis: duodenal tumor during diagnostics and sideropenic anemia. Abdominal ultrasonography and colonoscopy showed no abnormalities. However, gastroscopy revealed the following: “...probably in the distal part of the descending duodenum, presence of an exophytic, solid and ulcerated lesion, 20 mm in diameter. Conclusion: duodenal tumor”. No other lesions were found. The patient was discharged home without bleeding symptoms and with the following recommendations: perform abdominal CT and surgical consultation with eventual qualification towards surgical intervention after obtaining the required results (they will be sent to the patient after 4 weeks).

Before receiving the results the patient was admitted to the department of gastrology of our hospital with symptoms of gastrointestinal tract bleeding. On admission, the patient was conscious, sweating, and pale, with a blood pressure of 120/80 mm Hg, and heart rate 120/min. Morphology was as follows: HGB 6.3 g/dl, HCT 19.2%, RBC 2.17 mln. Gastroscopy performed on admission revealed the presence of fresh blood in the duodenum. Conservative therapy was initiated (intravenous omeprazol and tranexamic acid (Exacyl), as well as whole blood and anti-hemophilic plasma transfusions).

Due to lack of improvement and continuous bleeding symptoms (low HGB level, tarry stool, tachycardia) the patient was transferred to an intensive care unit. Conservative therapy proved ineffective: after transfusion of 4 units of whole blood and anti-hemophilic plasma control hemoglobin values amounted to 6.7g%. Tachycardia was observed with normal blood pressure values. Tarry stools appeared with the presence of fresh blood. The patient was qualified towards surgical intervention. Intraoperatively, we observed a significant amount of blood in the bowels. After performing Kocher’s maneuver- we evaluated the entire duodenum- no pathological lesions were observed. Further examination of abdominal cavity organs demonstrated the presence of a 4x4 cm large jejunal lesion localized 10 cm behind the suspensory muscle of the duodenum. The lesion proved mobile infiltrating the lumen of the intestinal wall, as well as beyond (fig.1). Enlarged mesenteric lymph nodes were not observed. The tumor was excised with a fragment of the small bowel and healthy tissue margins. Intestinal continuity was restored by means of an end-to-end anastomosis. Postoperative examination of the specimen showed the presence of an exophytic lesion with multiple ulcerations (fig. 2).

The postoperative course proved uneventful. The patient was discharged from the hospital nine days after the operation. The histopathological examination result (nr-525921-30) was as follows: „plasmocytoma, a 9 cm fragment of the small bowl was evaluated, 2 cm from the incision line presence of a 5x4x4 cm tumor, partly covered by an unchanged mucous membrane, infiltrating the submucosa and muscular membrane of the intestinal wall. The surgical incision line passes through the

Fig. 1. Plasmocytoma of the small bowel

Fig. 2. Image of the tumor after intestinal dissection
Plasmocytoma – a rare cause of upper gastrointestinal bleeding

bowel unchanged. The immunohistochemical examination was as follows: plasma cells (+++), Ki 67 (+), Kappa chains (-). Lymph nodes -2: free of neoplastic cells 0/2.

DISCUSSION

Considering rare duodenal and small bowel lesions responsible for gastrointestinal bleeding the following should be mentioned: inflammatory lesions, diverticuli, polyps, enterovascular fistulas, angiogenic lesions, and often neoplasms. Small bowel neoplasms constitute 1-2% of all gastrointestinal tumors (8). The most common include adenocarcinomas, lymphomas, carcinoid tumors, gastrointestinal stromal tumors (GIST) (9), leiomyosarcomas, and melanoma metastatic lesions. Gastrointestinal bleeding is not a characteristic symptom of small bowel tumors. Such patients are often hospitalized and exposed to multiple examinations, due to bowel passage disturbances, recurrent vomiting, and abdominal pain. Tumors penetrating the small bowel can cause intussusception leading towards intestinal obstruction. Sometimes, small bowel tumors are diagnosed during surgical procedures performed for other reasons (10).

The above-mentioned patient is such an example, where the source of bleeding localized in the small bowel was difficult to find. Recurrent gastrointestinal bleeding symptoms were observed for the past two years. Routine endoscopic procedures did not establish the source of bleeding. During the patients’ last hospitalization at the Department of Gastroenterology the duodenoscopic examination revealed the presence of a tumor in the distal part of the duodenum with the possible infiltration originating from the pancreatic head. The patient was admitted to the hospital with gastrointestinal bleeding symptoms, before we were able to obtain histopathological examination results collected from the tumor. In the face of suspicion of a duodenal tumor the decision concerning surgical intervention proved difficult, due to the possible need of performing pancreato-duodenectomy. Due to active bleeding and ineffective conservative management surgical intervention was necessary.

The resected tumor proved to be a plasmocytoma. Extramedullary plasmocytoma localization is a rare disease entity. Extramedullary plasmocytoma diagnosis is established on the basis of numerous additional examinations, such as exclusion of paraproteinuria, the Bence-Jones protein, and bone lesions in spite of a normal bone marrow. More than 70% of isolated, extramedullary plasmocytoma lesions are diagnosed in the upper part of the respiratory system, nasopharynx and esophagus. Only 12% of patients are diagnosed with extramedullary plasmocytoma lesions localized in the gastrointestinal system (11). The above-mentioned patient was directed for further consultations and diagnostics to the Oncological Center. Further examinations should answer the question whether the above-mentioned was an isolated case of extramedullary plasmocytoma or a coexisting lesion in a patient with multiple myeloma.

REFERENCES


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