A COMPLICATED COLORECTAL CANCER RECURRENCE

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Summary

The case report demonstrates painstaking, one step at a time multitherapy for the third most common cancer and the third cause of cancer death in western countries – colorectal cancer. Multitherapeutic approach at specialized centers for the treatment of colorectal cancer is the cornerstone for reaching favorable treatment results and prognosis.

Keywords: Colorectal cancer, sigmoid colon, adenocarcinoma, metastases, surgery (laparotomy), chemotherapy, radiotherapy.

AIM OF THE DEMONSTRATION

The aim is to demonstrate therapeutic approaches for the treatment of complicated local recurrences of colorectal cancer and metastases in liver of a patient with poor general condition.

CASE REPORT

A 50-year old female presents with a history of abdominal pain and diarrhea for the last few days. Preceded colonoscopy revealed a malignant neoplasm of sigmoid colon. After performing a laparotomic sigmoid colon resection with D2 lymphadenectomy (as reported in medical record) in a low-surgical-oncology-volume hospital, results show the following definitive diagnosis – *Sigmoid colon cancer III, pT3N2aM0G3R0*. Patient was referred to Latvia Oncology Center. The decision to start adjuvant chemotherapy was made. In next three months, mFOLFOX6 chemotherapy was performed. Control CT-scan and MRI of the abdominal cavity revealed two solid metastatic lesions in Sg5 and Sg7 of the right liver lobe and metastases in left parailiacal and paraaortal lymph nodes, which caused occlusion of the left ureter and led to left side hydronephrosis. Percutaneous nephrostomy was placed. Chemotherapy course with additional Irinotecan and Bevacizumab was started. After good response to chemotherapy, second operation was performed: right side hemihepatectomy, liver Sg2 atypical resection, hepatoduodenal ligament, parailiacal and paraaortal lymphadenectomy, ligation of inferior mesenteric artery (IMA) with lymphadenectomy (D2 lymphadenectomy was not done at previous operation) and left ureter was resected *on block* with end-to-end anastomosis and stent implantation. Results of the pathohistological examination showed adenocarcinoma metastases in liver and 7 out of 15 lymph nodes contained adenocarcinoma macrometastases. One month after operation, the patient was hospitalized with poor general condition, icterus, cachexia, ascites, severe hypoalbuminemia, and coagulopathy. The drained fluid (10L) contained bile. An MRI scan revealed biloma,

common bile duct lesion, postoperative hernia. During the third laparotomy the left bile duct anastomosis with jejunum was sutured on external biliary drainage (Roux-en-Y reconstruction). The control MRI in 5 months showed metastasis in liver's Sg3. After the patient received stereotactic radiation therapy (SBRT), the MRI examination 3 months after the SBRT didn't reveal any metastasis in liver. Control MRI in 3 months revealed specific left parailiacal lymph node – 1,9x1cm. Two weeks later the patient was admitted to hospital for left parailiacal lymphadenectomy and herniorrhaphy and recovered successfully. The multidisciplinary oncology team decision is to proceed treatment with palliative chemotherapy.

DISCUSSION

Since 2009, colorectal cancer (CRC) screening has been conducted in Latvia. However, in two cases out of three (5) cancer is diagnosed only at the stage III-IV, when metastases have spread to other organs. Liver is the most common site of metastatic CRC (due to its anatomical situation), occurring in approximately 50% of all patients, who in turn have a median survival of 5 to 20 months with no treatment (6). The most important prognostic factors for stage I-III CRC are T stage, radicality of resection (free resection margins) and lymph node involvement (N stage). The nodal positivity rate for CRC approximates 50-60% across a wide range of studies internationally (3). 10-30% of patients with N0 and more than a half of patients of N1-2 will have local CRC recurrence or progression (2). It is important to perform IMA ligation at the origin with extended (D2-D3) lymphadenectomy to control a disease and increase survival.

The management of metastatic CRC treatment should include several therapeutic approaches, offered by endoscopists, gastrointestinal and interventional radiologists, gastroenterologists, surgeons, pathologists, oncologists (medical and radiation), nutritionists, physical therapists.

Colon resection is the first line treatment for early stage CRC and CRC with no identified metastases (1). Typical radical colon resection is performed together with ligation of the IMA at the origin or below the origin of the left colic artery, while chemotherapy is the first treatment option for metastatic disease. Perioperative chemotherapy must be administered 2-3 months before the surgical procedure and 3 months after the surgery (1).

The clinical case shows that, if cancer patients undergo surgery in a non-specialized center with a small institutional volume, the number of local relapses is more frequent, which is the result of non-radical surgery. "Specialized surgical oncologists comprise a larger portion of the workforce for complex/ rare tumors." (4) This means that definitive treatment of temporarily undiagnosed complications is possible only in specialized centers and requires certain resources and a multidisciplinary approach.

Conflict of interest: None

Fig. 1. Liver metastasis before 2nd operation in Sg7

Fig. 2. Non ligated IMA (1) and metastatic lymph node with left ureter involvement (2) in 2nd operation

Fig. 3. Parailiacal lymphadenectomy in 4th operation

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