TRANSVERSE COLON CANCER – CLINICAL CASE

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colon cancer

Keywords: transverse Abstract: Colon cancer is the main cause of morbidity and mortality rate in the world, with great impact on medical and economic fields. It affects one out of 20 people in the developed countries, in Europe being the second most common cause of death related to cancer. In Romania, the incidence of new cases of cancer is of 8.696. The purpose of this presentation is to reveal the particularities of a surgery done right in emergency as well as from a far, in the case of a complicated colon transverse neoplasm.

INTRODUCTION

Colon cancer is the main cause of morbidity and mortality rate in the world, with great impact on medical and economic fields. It affects one out of 20 people in the developed countries, in Europe being the second most common cause of death related to cancer. In Romania, the incidence of new cases of cancer is of 8.696. Carcinoma of the transverse colon accounts for 10% of all colorectal cancer. In the early stages of the disease, patients do not show symptoms, or they have faded signs. When the symptoms appear they depend on the size of the tumour and its location.

PURPOSE

The purpose of this presentation is to reveal the particularities of a surgery done right in emergency, as well as from a far, in the case of a complicated colon transverse neoplasm.

CASE REPORT

We present the case of patient, M.C., aged 51 years old, who lives in Râmnicu-Vâlcea city, blood type AII, who came at the Clinical Emergency Hospital Sibiu, I Surgery Department, on 26th of March 2015, as an outpatient, complaining about the following symptoms: colorectal pain in the superior abdominal region, flatulence. In terms of pathological personal history, the patient was admitted at the Horezu City Hospital from Râmnicu-Vâlcea, on the 6th of March 2015, for acute abdomen, bowel obstruction, where he had emergency surgery. During the procedure, it was revealed that the transverse colon tumour was penetrating into the mezocolon and at the base of the mezentary, with neoplazic ascites liquid and liver metastases. An ileum-transverse colon-anastomosis monoplane drainage was performed. The recovery after the surgery was good; the patient was released after his surgical incision was healed. He was advised to:

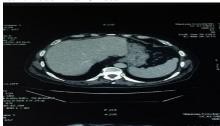
- keep a proper diet;
- avoid increased physical effort for 6 months;
- in terms of medication, he was prescribed Omeran-40 g, one capsule a day, for 60 days, No-Spa tablets three times a day for 10 days. Complementary investigations:
- abdominal CT after 30 days and then he returned for an examination for a re-evaluation.

Biological samples were collected, and the following results were found:

- high fibrinogen level of 433, 6 mg/dl,
- hemoglobine (HGB) 9,5g/dl,
- hematocrit (HCT) 31,7%,
- medium cell volume (MCV) 62,8 Fl,
- medium concentration of hemoglobine (MCH) 18,8 pg.

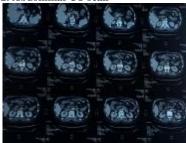
The Computed Tomography (CT) abdominal pelvin exam (figures no. 1,2), native and intravenous postcontrast with continuous sections, revealed basal lung segments with no suspicious images, enlarged liver (LSH 10 cm, LDH 20 cm), homogenous native and postcontrast, enlarged spleen, enlarged axis of 14,5 cm, pancreas and kidneys with no modifications. Therefore, liver metastases from the first operation could not be confirmed.

Figure no. 1. Abdominal CT scan



The colo-entero post-anastomosis state, at the transverse colon, that has an infiltrative tissue mass that narrows the lumen and shield the adipose tissue around, more precisely small milimetrical lymph adenopathies. Also there were no ascites, pathological pelvine masses, and no levels of liquid or

Figure no. 2. Abdominal CT scan



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The endoscopic report shows, on 25 March 2015, that in good conditions we can get as deep as the transverse colon, the ileo-cecal anastomosis. At this level, the lumen of the colon appears completely stenosed by a tumoral formation, as well as sessile polyps in the descending colon.

On 26th of March 2015, there was an iterative surgical procedure and we revealed a stenosed transverse colon tumour that penetrated the mezocolon and the basal mezenterical segment. Also 5 cm before the tumour, we discovered an ileotransverse anastomosis. There were no liver metastases revealed, or paraneoplasical ascites. A right enlarged hemicolectomy was performed (figure no. 3), which also canceled the ileo-transverse anastomosis.

Figure no. 3. Tumor invasion



The reinstallation of the digestive continuity is being done by making a ileo-transverse anastomosis at spleen angle level in double layers separated by nylon wires size 10. The resection was extremely difficult due to the invasion of the tumour in the transverse mezocolon as well as in the mezentery (figure no. 4). The evolution after the surgery was good, the patient was released 7 days later, the next step being finding out the hystopathological result and the extend of the lymphnodes so that an oncological treatment would be recommended.

Figure no. 4. Postoperative specimen



DISCUSSIONS

Regular colorectal cancer screening or testing is one of the most powerful weapons for preventing colorectal cancer. Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in, both men and women in the United States. Overall, the lifetime risk for developing colorectal cancer is about 1 in 20 (5%).(1,2,3) Carcinoma of the transverse colon accounts for 10% of all colorectal cancer. Diagnosis is often delayed and complicated forms (perforation, fistulisation, obstruction) occur in 30-50% of cases.(1)

Surgical series which focus on transverse colon cancer date from the 1970-80's; they show curative resections in only 50% with morbidity/mortality of 20% and a global five year survival of less than 35%; they were considered to have a particularly poor prognosis.(1) Tumours in the transverse colon pose several challenges for the surgeon. They can receive blood

supply from the right colic, middle colic as well as the left colic artery and hence the lymph-bearing area can be wide. (7) A segmental resection of the transverse colon can result in tension on the anastomosis secondary to the fixity of the ascending and descending colon in the retroperitoneum. In addition, there is an increased risk of anastomotic leak when performing colon to colon anastomosis compared to ileocolic anastomosis. (5) To avoid this, and make sure that all the lymph-bearing area of the tumour has been removed, and because of the fact that we found an ileo-transverse anastomosis, we preferred to do an extended right hemicolectomy.

En bloc resection of contiguous structures is indicated if there is attachment or infiltration of the tumour into a potentially resectable organ or structure. Patients with symptoms of complicated disease (e.g., obstruction in our case) may require a staged approach to resection.(6) In our case we practiced en bloc resection extended right hemicolectomy with the old ileo-colic anastomosis.

CONCLUSIONS

In occlusive cancer in the E.R., it is ideal to make a digestive bypass to get the patient out of the critical state in order to have the oncological surgery performed.

Some intraoperative aspects should be checked because some errors might occur, if we took into consideration the first operative description we would not have performed any surgery because it meant it was pointless to do so.

The radical oncological treatment can add time to the patient's life, the survival up to 5 years after the surgery.

In our case, the patient was 50 years old, the effort and difficulty of the surgery were justified.

We recommend that the surgical interventions in the case of neoplasm that are difficult to operate should take place in specialized clinical centres.

REFERENCES

- American Cancer Society. Cancer Facts & Figures 2015.
 Atlanta, Ga: American Cancer Society; 2015.
- Kushi LH, Doyle C, McCullough M, et al. American Cancer Society Guidelines on nutrition and physical activity for cancer prevention: reducing the risk of cancer with healthy food choices and physical activity. CA Cancer J Clin. 2012 Jan-Feb;62(1):30-67.
- Levin B, Lieberman DA, McFarland, et al. Screening and surveillance for the early detection of colorectal cancer and adenomatous polyps, 2008: a joint guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology, CA Cancer J Clin. 2008;58:130-160.
- 4. Lê P, Mehtari L, Billey C. Carcinoma of the transverse colon, J Chir (Paris). 2006 Sep-Oct;143(5):285-93.
- Kim HJ, Lee IK, Lee YS, Kang WK, Park JK, Oh ST, Kim JG, Kim YH. A comparative study on the short-term clinicopathologic outcomes of laparoscopic surgery versus conventional open surgery for transverse colon cancer. Surg Endosc. 2007;23:1812-7.
- Valsdottir EB. Laparoscopic extended right hemicolectomy for transverse colon cancer 2005, www.eas-eur.org.
- Stojadinovic A, Nissan A, Protic M, et al. Prospective randomized study comparing sentinel lymph node evaluation with standard pathologic evaluation for the staging of colon carcinoma: results from the United States Military Cancer Institute Clinical Trials Group Study GI-01. Ann Surg 2007;245:846.