

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Surgery Quiz – Case 6

A 29-year-old female patient was referred to us from a district hospital where she had been admitted due to high fever, pain in the left hypochondrium and microcytic hypochromic anemia. Physical examination revealed pale conjunctivae, normal respiratory sounds and sinus tachycardia with no additional sounds. Her abdomen was soft with mild tenderness on palpation of the left upper quadrant. Bowel sounds were normal and digital rectal examination was also normal. No peripheral lymphadenopathy. An ultrasound and CT scan of her abdomen revealed a hypodense lesion 5 cm in diameter in the lower splenic pole containing an air bubble. The diagnosis was splenic abscess and the patient was referred to us for further management. Her past medical history included iron-deficiency anemia that was first diagnosed three years ago and was attributed by her attending physician to blood loss due to hemorrhoidal disease and menorrhagia. Family history was free.

When she arrived at our department she was in good clinical condition without fever. After obtaining a more detailed history she mentioned a high energy blunt abdominal trauma on her left side two months ago that kept her in bedrest for few days. Moreover, when she was feverish, both her children presented flu-like symptoms and high fever. Full blood count and blood biochemistry were unrevealing apart from a low Ht (24%). Neoplastic markers were also within normal limits. She underwent an upper abdominal MRI in order to diagnose whether the splenic lesion was indeed an abscess or a hematoma related to her recent trauma two months ago. The conclusion of the MRI was that the lesion had radiological characteristics of an old organized hematoma 5×4.5 cm in diameter (fig. 1) and apart from a small (1 cm) hemangioma of the liver no other pathology was recognized. Her vital signs and her Ht was stable at all times.

We decided to perform a colonoscopy prior to the patient's discharge in order to investigate further the cause of her anemia. Colonoscopy revealed a large mass in the descending colon near the splenic flexure. Biopsies confirmed that it was colon cancer and laparotomy was the next step. Intraoperative findings were a large tumor of the splenic flexure of the colon, invading the spleen, the pancreatic tail and the lateral abdominal wall. A left hemicolectomy, splenectomy and peripheral pancreatectomy were performed as well as resection of the invaded abdominal wall. The pathology report indicated a mucinous adenocarci-

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noma of intermediate differentiation with 4 cm invasion of the spleen and the tail of the pancreas (T4) (RO resection). All of the 26 lymph nodes excised were free of disease (N0). The final staging was T4N0M0 (stage IIB). The postoperative course was complicated by gastric atony, lasting almost three weeks that was successfully treated conservatively. She recovered fully and is now receiving adjuvant chemotherapy.

Comment

In western countries, cancer of the colon and rectum ranks second after cancer of the lung in incidence and death rates. Although primarily a disease of older patients, 4–8% of these cancers are found in younger patients <40 years of age. It is generally believed that young patients with colorectal cancer have a worse survival rate. This may be due to the fact that the tumor is at advanced stage at the time of diagnosis. Reports from Europe demonstrate that the 5-year survival rate for patients 30 years old or younger is only



Figure 1. MRI of the splenic lesion 4.5×5 cm in diameter (arrow).

25–30%. Young patients are more likely to present with late stage disease. About 60–67% of young patients with colorectal cancer have a later stage disease, most of which are poorly differentiated or mucinous tumors indicating a very poor prognosis. However, if detected early, young patients with Dukes' stage A or B lesions have better overall 5-year survival rates. These findings emphasize the need for health care providers to have a heightened awareness of the possibility of colorectal cancer when caring for this young population and for the surgeon to take an aggressive approach to the diagnosis and early treatment of the disease.

Due to the low index of suspicion of colorectal cancer in this young population, the symptoms are usually underestimated and delays in diagnosis occur. Medical practitioners are required to differentiate between patients whose symptoms may be due to cancer and the much larger number of patients whose symptoms are attributable to benign self-limiting illness. Our patient had an unexplained microcytic hypochromic anemia for 3 years that was not investigated by her physician and as a result of this she presented with later stage cancer. The presence of blood in her stools was easily, without any further examinations, attributed to hemorrhoidal disease, which was not present neither on digital examination or when she had the colonoscopy at our department. Even when the lesion in the spleen was discovered, it was at first attributed to other causes (abscess, hematoma) rather than cancer. The diagnosis of splenic hematoma due to trauma was very appealing since, apart from the radiological images, it would also give us an explanation of her severe anemia. Had we not proceeded to colonoscopy the patient would have been discharged misdiagnosed and would probably present later with end-stage disease. So, we can agree

that initial misdiagnosis, inadequate examination and inaccurate investigation are the main reasons of increased delay of diagnosis by the practitioner.

The prognosis of young patients with colon cancer depends mainly on the clinicopathological characteristics. Early endoscopy is recommended for all patients with gastrointestinal symptoms. Early diagnosis, radical resection, and adjuvant therapy still form the cornerstone in management of colorectal cancer in this age group.

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