Small Intestine Adenocarcinoma in a Patient with Anemia

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Abstract

We present a case of a 43-year-old man with small intestine adenocarcinoma. The patient was admitted to the hospital to expand diagnostics of anemia as evaluation that was done on an outpatient basis did not show its root cause. We performed video capsule endoscopy that showed multiple polypoid lesions in the jejunum. Double-balloon assisted enteroscopy was done to take tissue samples but revealed stricture in the proximal part of the jejunum due to proliferative lesion and because of threatening ileus patient required urgent surgical treatment. Histological examination of metastatic tumor located in greater omentum showed adenocarcinoma cells. Patient was referred to the oncologist for further systemic treatment.

Introduction

Neoplasms of the small intestine are rare oncologic diseases. According to the Polish National Cancer Registry in 2013 only 0.5% of all malignancies were located in the small intestine. During the last four decades there was a raise of over 100% in incidence [1,2]. The malignancies occurring in the small intestine are divided into several histological types: Adenocarcinomas (account for 30%-40% of cases), carcinoids, sarcomas, lymphomas and gastrointestinal stromal tumors. Adenocarcinomas are mainly located in the duodenum and jejunum (86%). The significant risk factors include hereditary diseases like: Familial adenomatous polyposis, Lynch II syndrome, Peutz-Jeghers syndrome and predisposing diseases like: Crohn’s disease, coeliac disease, a history of cholecystectomy or sporadic polyps [1,3,4].

Case Presentation

A 43 year-old man with prior history of von Willenbrand disease was admitted to our hospital for diagnostics of microcytic hypochromic anemia recurring for many years before hospitalization and nonspecific abdomen pain. Outpatient evaluation of the upper and lower gastrointestinal tract did not reveal the cause of the above symptoms. Abdomen CT did not show any abnormalities.

After admission to the hospital video capsule endoscopy was performed twice due to technical defect. During the second examination the asymptomatic retention of the former capsule was observed as well as multiple polypoid lesions in the jejunum (Figures 1A-1D). Double-balloon assisted enteroscopy was next performed to take tissue samples from revealed lesions. During examination stricture in the proximal part of the jejunum due to proliferative lesion was showed (Figures 1E-1G). Those pathological changes in the jejunum did not allow biopsy to be taken due to technical limitations. Threatening ileus decided on an urgent surgical treatment. Laparotomy revealed primary tumor infiltrating the mesentery of the small intestine (unresectable lesion) (Figure 1B).
1H) and the presence of metastatic tumor in the greater omentum. Histological evaluation of taken tissue preparations found metastatic lesion of adenocarcinoma probably from the small intestine. Gastric bypass anastomosis was performed and patient was referred to the oncologist for further treatment.

**Discussion**

Usually patients do not experience any symptoms at the early stage of the disease but when they do it is mainly nonspecific abdominal discomfort, gastrointestinal bleeding, anemia, weight loss or intestinal function disturbance. In advanced stages obstruction symptoms may appear [5]. Diagnostics methods commonly used due to high availability include abdominal ultrasound and CT. Usually they show nonspecific abnormalities like thickening of the bowel wall or lymph nodes enlargement. Also esophagogastroduodenal endoscopy and colonoscopy enables diagnostics of lesions located only in the duodenum. Both video capsule endoscopy and double-balloon assisted enteroscopy are available in a few medical centers. These difficulties extend the diagnostic time and advancement of the disease at diagnosis which strongly affects the survival. In case of localized lesions 5-year survival exceeds 85%, if regional lymph nodes are involved it drops to 74.6% but if distal metastases are present 5-year survival is only 42% [1].
Conclusion

Presented case shows that in the course of diagnostics of anemia examination of the small intestine may be crucial even for patients without any predisposing risk factors for the small intestine malignancies and mild symptoms from gastrointestinal tract. Neoplasms located in the small bowel are still rare but medical professionals should be aware of the significant rise in incidence and strong dependence of the survival on the advancement of the disease at the diagnosis.

References


