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Mucinous Adenocarcinoma of Terminal Ileum Presenting as Fistula Formation with Urinary Bladder: A Case Report

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1. ABSTRACT

Small bowl malignancies are rare and mostly present with non-specific symptoms and are therefore diagnosis is missed or diagnosed in late stages.

We present a case of 71 years aged male who presented with passing food like debris in his urine. After CT abdomen, he was found to have a mass arising from terminal ileum and fistulating with urinary bladder. He was operated, tumor resected with tumor free margins and ileotransverse anastomosis and repair of urinary bladder performed. The mass turned out mucinous carcinoma of terminal ileum. He improved but was extremely malnourished and expired six months after surgery.

2. INTRODUCTION

The global incidence of small bowel malignancy is 0.3–1.5 cases per 100,000 population which is extremely rare [1]. The prevalence of small bowel cancer increases with age and are mostly diagnosed at a mean age of 60 years. Risk factors for small bowel adenocarcinoma are Crohn's disease, coeliac disease, adenoma of the small bowel, Familial Adenomatous Polyposis (FAP), Peutz-Jeghers syndrome (PJS), cigarette smoking and obesity [2]. Patients with small bowel adenocarcinoma tend to present with non-specific symptoms. Atypical clinical presentation often leads to diagnosis at an advanced stage [3]. It remains unnoticed until complications emerge with major clinical manifestations such as abdominal mass, abdominal pain, obstruction, anemia and fever. Due to the lack of specific manifestations, ileocecal tumor is easily confused with appendicitis, enterophthisis, Crohn's disease, ulcerative colitis and malignant intestinal lymphoma, resulting in a high misdiagnosis rate [4]. Here we report a case of mucinous carcinoma of terminal ileum in elderly male patient with an atypical manifestation.

3. CASE SUMMARY

A 71 years aged male presented with dysuria and passage of digested food like debris in urine for one year. There was history of off and on vague abdominal pain and significant weight loss was visible. On physical examination, patient was palor, but not jaundice. There was not any regional lymphadenopathy. Abdominal examination was unremarkable. His Hb was 8 gm/dl and urine contained pus cells.

Contrast enhanced CT abdomen revealed large soft tissue heterogeneously enhancing lesion arising from terminal ileum with exophytic projections envolving dome of the urinary bladder having fistulous communication.

Patient was admitted, prepared and exploratory laparotomy was performed. Terminal ileum along with a half foot normal ileum and ascending colon resected and ileotransverse anastomosis performed. Abnormal looking tissue was also resected from dome of urinary bladder and urinary bladder closed primarily. Specimen was subjected to histopathology which was reported as mucinous carcinoma of terminal ileum involving all layers of ileum with perforation. Proximal, distal margins of the specimen, mesenteric margin and regional lymph nodes were tumor free.

Patient was sent home after four days of hospitalization and was advised to consult oncologist. Oncologist, after work up, decided that the patient is too lean and thin and cannot tolerate even a single chemo medicine and suggested nutritional build up. He was doing well for four months but then presented with episodes of unconsciousness and anorexia. He was admitted again and CT abdomen was performed which was reported as about 8.2 cm x 5.4 cm collection and urinary bladder wall thickening. His serum albumen was 1.8 gm/dl and Hb% was 7 gm/dl. He was admitted again. Parenteral nutrition was started but after few days of admission, he collapsed and breathed his last in ward.

4. DISCUSSION

Mucinous adenocarcinoma is rare malagnancy. The enzymatic activities of arylsulphatase and lysozyme are higher in mucinous adenocarcinoma than in other adnocarcinomas, and these two enzymes can degrade the proteoglycan barrier, giving to mucinous adenocarcinoma the ability to infiltrate and metastasize. Tumor cells infiltrate the intestinal wall to form internal or external fistula, leading to the development of abscesses in and around the infiltrated tissues [5]. Our case also presented with internal fistula.

The early symptoms of ileocecal tumor are mild and non-specific, resulting in misdiagnosis and delayed treatment. In the early stage, the tumor mass is hardly detectable by B-ultrasound, multislice helical CT (MSCT) or MRI. In the mid-late stage, MSCT and electrical colonoscopy are especially important for the diagnosis of ileocecal tumor. Therefore, colonoscopy in combination with CT imaging can delineate the structure of the ileocecal lesion and its surrounding tissues. In our case contrast enhanced CT abdomen revealed fistulous communication between ileum and dome of urinary bladder. Our Patient underwent exploratory laparatomy and found to have a mass arising from terminal ileum communicating with urinary bladder. Right hemicolectomy with resection of terminal ileum and ileotransverse anastomosis was performed. Specimen turned out mucinous carcinoma of terminal ileum.

5. CONCLUSION

Small intestinal tumors are rare but are increasing in elderly presenting with Vague abdominal symptoms. Hence must not be ignored and must be properly assessed and investigated through colonoscopy and CT abdomen. If any lump detected, must be subjected to histopathology to reach to the definitive diagnosis and to treat accordingly.

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