Rare cause of small bowel obstruction: Metastatic squamous cell carcinoma with occult primary

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Abstract

Only 1% to 2% of all malignant tumors of gastrointestinal tract occur in the small bowel. Metastatic tumors are more common than primary tumors of small bowel. In case of metastatic small bowel disease most common primary is melanoma followed by adenocarcinoma and rarely squamous cell carcinoma. Isolated metastatic disease presenting with stricture is further a rare presentation and very few case has been reported. Most common presentation is obstruction. It represents a metastatic disease with poor prognosis. Due to aggressive nature and resistance to chemotherapy overall survival of these patients are 6 to 9 months.

Keywords: Small bowel obstruction, metastatic squamous cell carcinoma

Introduction

Malignant disease of small bowel are rare among gastrointestinal tract malignancy and it account for 2% of all GI tract malignancy [1,2]. In gastrointestinal tract metastatic disease is more common in small bowel [3]. Among malignant small bowel disease metastatic disease is more common than primary small bowel malignancy [3]. Duodenum is most common site of malignant small bowel disease followed by jejunum than ileum [4, 5]. In case of metastatic small bowel disease most common primary is melanoma followed by adenocarcinoma and rarely squamous cell carcinoma (SCC) [6]. Rarely there is isolated metastatic disease to small bowel present as stricture. Hematogenous spreads, lymphatic spreads are the route of intestinal metastasis with hematogenous being more common. Direct involvement of adjacent tumors can also cause of small bowel obstruction (SBO) [3]. Obstruction is most common presentation of metastatic SBO followed by hemorrhage and perforation [7]. As a metastatic SCC, cervix is second most common site preceded by lung SCC [8]. Here we report a case of metastatic SCC of small intestine presenting as SBO.

Case report

A 45 years female presented with history of recurrent colicky pain lower abdomen since 4 months. Initially pain was colicky and associated with abdominal distension with few episodes of bilious vomiting. Duration of pain was 5 to 6 hours for which patient was admitted in hospital for treatment and managed conservatively. Since 2 months intensity and frequency of pain got increased and was associated with visible peristalsis. There is history of loss of weight (more than 5% in 3 months) and poor appetite. History of bleeding per vaginam for 4 months with foul smelling discharge. Past history of hysterectomy 2 years back for cervical cancer following which no adjuvant therapy was taken by patient. On general examination pallor was present, abdominal examination showed occasional visible peristalsis, bowel sound was exaggerated. Per vaginal examination showed vault growth which bleed on touch. X ray abdomen showed multiple air fluid levels with dilated small bowel loops (fig 1). CT enteroclysis done which showed multiple air fluid level suggestive of small bowel obstruction (fig 3, 4) and enhancing lesion at vaginal vault suggestive of tumor recurrence (fig 2). Biopsy from vault was positive for malignancy. Patient planned for surgery. On exploration mild omental adhesion was present at previous incision site. Small bowel was dilated, 4 strictures were present in small bowel at distance of 3, 3.5, 5 and 5.5 feet from duodenojejunal junction (fig 5, 6, 7). Resection of stricture segments with side to side hand sewn anastomosis done. Postoperative period was uneventful, post op day 1 nasojejunal feeding started, patient discharged at postop day 10. On follow up overall survival was 5 months.
No adjuvant therapy were given to patient as poor performance status. Histopathology of specimen showed infiltration of metastatic squamous cell carcinoma in submucosa, subserosa, muscularis propria with lymphovascular invasion.

**Fig 1:** Image showing dilated small bowel loops (arrow marked).

**Fig 2:** Showing enhancing lesion in vaginal vault suggestive of vault recurrence (arrow marked).
Fig 3-4: CT enteroclysis showing dialated small bowel loops with multiple air fluid levels.

Fig 5: Resected small bowel specimen with multiple strictures.

Fig 6-7: Resected segment of small bowel showing stricturing growth. (Marked with arrow).

Discussion
Small intestine involvement due to secondary lesion is more common due to peritoneal deposits, ascites, lymph nodal metastasis [9]. Isolated involvement of small bowel is rare. Metastatic disease are more common than primary malignant tumor of small bowel [4, 5]. Of metastatic disease to small bowel, melanoma is most common [6]. In case of metastatic SCC to small bowel, lung is most common primary site, others are cervix, esophagus, skin, penis, ovary, pancreas and gallbladder [7]. Metastatic SCC to small bowel can present as synchronous or
metachronous disease [10-12]. Patient should be evaluated for past history of surgery of malignant disease. Most common presentation from metastatic small bowel disease is obstruction, less common are hemorrhage, perforation [10, 11]. Histopathology of lesion have infiltration of submucosa, subserosa, muscularis propria but mucosal glandular epithelium are rarely involved [13]. Overall prognosis of metastatic SCC is very poor. Most of patient present in emergency as obstruction or perforation. Surgery should be limited to segmental palliative resection or bypass procedure in case of obstruction.

Conclusion
Though metastatic SCC causing SBO is rare but it should be considered when past history of hysterectomy for cervical cancer is present. In our case obstruction was partial which gave us time for thorough evaluation with CT enteroclysis and vault biopsy and at the same time preop optimization of patient which resulted in smooth post-operative course. But due to poor prognosis of disease overall survival of our patient was 5 months.

References