CASE REPORT

A Rare Case of Intussusception Associated with Metastasize Small Cell Carcinoma of Lung

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Abstract- Intussusception is common cause of bowel obstruction in the paediatric age group compared to the elderly population. Many times, The diagnosis may be difficult because of asymptomatic nature of this bowel disorder. We hereby describe the case of a 75-year-old male who presented with lethargy, weakness, loss of movement in the joints and was found to be anemic. The haemoglobin level was low so he was transfused with packed cells. On gastrointestinal (GI) endoscopy, upper GI bleed was observed. A mass was observed beyond ampulla at the 2nd and 3rd part of the duodenal junction. Computerized tomography (CT) scan also showed a mass at the head of pancreas and the lesion at the left lung. In view of persistent bleed, 'Whipple's procedure' was performed. Histopathological examination showed small cell carcinoma of the lungs with metastasis to the pancreas and the jejunum. We here discuss the case of intussusception with intestinal metastasis which presented with gastrointestinal bleeding.

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Keywords: Intestinal metastasis; Intussusception; Small cell carcinoma

Introduction

Intussusception is a common cause of bowel obstruction in paediatric age group but it may be uncommon in elderly population. Research studies have reported an incidence on 5% in the adults (1). In 90% of cases, intussusception is secondary to a bowel disease while in 10% of cases no cause could be found (2). Asymptomatic cases may be difficult to diagnose. Gastrointestinal (GI) endoscopy and computerized tomography (CT) scan may help in the correct diagnosis. Adult cases of intussusception usually require surgery.

In the present case, we describe the persistent bleeding from the upper GI which was suggestive of duodenal ulcer. CT examination showed a mass. Interestingly, the mass which was taken for histopathological examination revealed small cell carcinoma of lungs. This, the main site of the lesion was in the lungs whereas the intestines were involved as secondary. No metastasis to the liver was observed. The clinical features, investigations and the treatment modalities of this case may aid surgeons in future diagnosis and treatment.

Case Report

We describe the case of a 75-year-old Chinese male. He was pensioner from a middle class family. The patient presented with symptoms of lethargy, weakness, anaemia and loss of movement in the joints. He also complained of passing of black stools. History revealed that all this occurred for about 2 months. There was no past history of diabetes mellitus, hypertension or any medication intake. There was no hematemesis but the hemoglobin (Hb) level was low. He was initially transfused with packed cell (4-6 packs) but the Hb still kept low.

On thorough examination it was found that he had no symptoms of abdominal pain or classical features of intussusception. On performing upper gastrointestinal

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(GI) endoscopy, upper GI bleed was observed. We observed a mass beyond the ampulla at 2nd and 3rd part of the duodenal junction. There were hemorrhagic clots at the site of the mass. It bled constantly. A clinical diagnosis of bleeding duodenal ulcer was made.

The patient still required transfusion but Hb level was not maintained. He needed 4-5 transfusions in the hospital within a span of 4-5 days. We performed CT scan which showed a mass at the head of the pancreas which gave the impression of pancreatic carcinoma. The CT scan also revealed a mass in the left lung. This prompted us to obtain the biopsy of the lung lesion at a later stage. In view of the persistent bleed, 'Whipple's procedure was planned in order to secure the persistent gastrointestinal bleeding. The intraperitoneal findings showed mass at the head of the pancreas, incidental finding of intussusceptions at the jejunum (Figure 1), multiple nodules in the jejunum (Figure 2).

No secondaries were found in the liver. En block resection of pancreaticoduodenotomy together with jejunal resection was performed. From duodenojejunal junction, 30 cm was taken out. Then performing routine hepaticojejunostomy, Post operative recovery was eventful in the patient.

Biopsy of the pancreatic mass and the jejunal lesions was suggestive of small cell carcinoma. Biopsy of the left lung lesion also confirmed the presence of small cell carcinoma. There was metastasis to duodenum and jejunum. There was complication with bleeding. Thus, it was an incidental finding of asymptomatic intussusception.

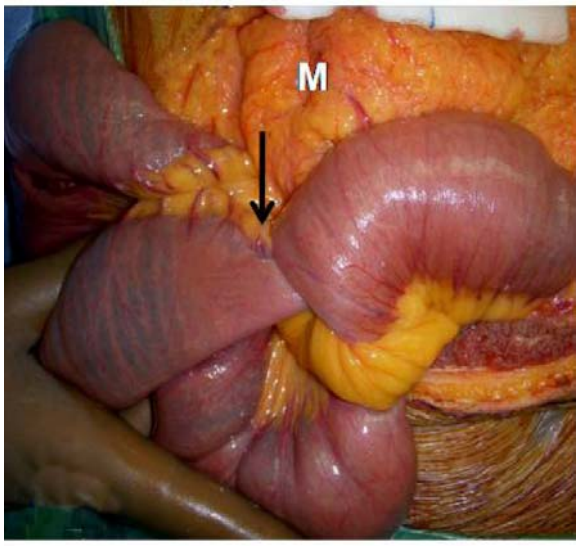

Figure 1. Photograph of jejunal intussusception. The arrow shows the site. M: Mesentery.

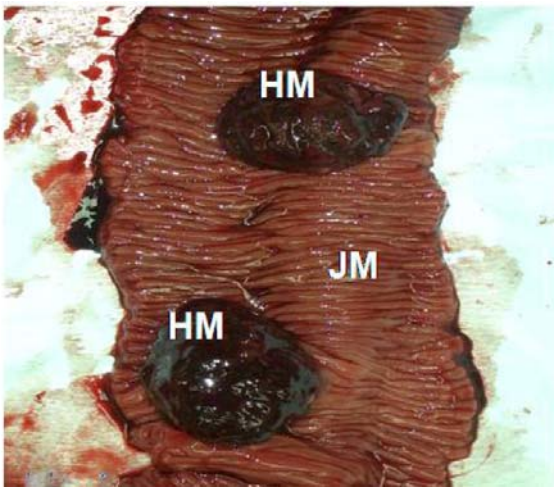

Figure 2. Photograph of the resected jejunum showing JM: Jejunal mucosa; HM: Hemorrhagic nodules.

Discussion

Intussusception is rare in the adult population. Interestingly, earlier researchers described that adult intussusception is associated with discrete pathologic process in 75% cases (3,4). In many cases, the intussusception may be associated with malignant neoplasms (4). In the present case, it was a small cell carcinoma of the lungs which was associated with intestinal intussusception. The intussusception case was asymptomatic and it was incidental finding.

GI endoscopy and CT scan helps in proper diagnosis. In the present case, it was GI endoscopy which showed the site of bleed and the CT scan which showed the mass but it was the X-ray which showed haziness in the base of the left lung suggesting lung involvement. The histopathological examination revealed small cell carcinoma of the lung with spread to the intestine. We thereby wish to stress on the fact that all cases of intussusception be examined thoroughly for the involvement of other organs should there be any underlying malignant lesion.

CT scan helps in differentiating a pathologic and non pathologic intussusception (5). Researchers described that the presence of a mass in CT scan with associated presence of neoplasms certainly warrants surgical treatment (5). Researchers held the view that intussusception that lack a pathologic cause of obstruction in CT scans may not require surgical intervention (5). In the present case, it is pertinent to mention that intussusception did not present with classical symptoms, hence it threw a challenge for proper diagnosis. Even the timing of the surgery is

important. We proceeded with 'Whipple's procedure' because of the persistent bleeding. One has to decide between the two facts i.e. size of the mass and the persistent bleeding.

A thorough search of the literature reveals that the primary neoplasms of the colonic and ileocolonic regions may be associated with adult intussusception (5). Even Celiac sprue and Crohn's disease have been suggested as non-neoplastic causes for intussusception in adults (6,7). The association of intestinal intussusception with a small cell carcinoma of the lungs is a rare entity. To the best of our knowledge no such case has been reported to date. Association of small cell carcinoma with intestinal intussusception may be important for surgeons. Even investigations like X-ray and histopathological examination can aid in the diagnosis. In conclusion, all adult cases of intussusception should be treated with surgery. The timing of the surgery depends on the severity of the clinical symptoms. In the present case, there were no secondaries to the liver leading to suspect of any cancer, hence even the best of clinicians would have faced a dilemma and would be misleading.

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