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Case Report

Multiple submucosal lipomas of small intestine: a case report

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ABSTRACT

Small bowel obstruction can be due to benign or malignant pathologies. Gastro intestinal lipomas are one of the benign subepithelial tumours causing obstruction. These are usually detected incidentally if asymptomatic. Adult intussusception due to intestinal lipoma is a very rare cause. We are presenting a case of male hypertensive patient with features of multiple subacute obstruction due to multiple submucosal lipomas in ileum. Exploratory laparotomy with intra-operative enteroscopy was performed and resection-anastomosis of affected segment was done.

Keywords: Submucosal lipoma, Obstruction, Enteroscopy, Multiple submucosal lipoma, Small bowel lipomas

INTRODUCTION

Submucosal lipomas of small bowel are a rare tumour of gastrointestinal tract. Gastrointestinal lipomas are benign, usually single, slow growing non-epithelial tumors.[1] The common site is the colon, although they may also be found in the stomach, oesophagus and small intestine.[1,2,3]

Submucous lipoma of small intestine which is otherwise silent pathology sometimes clinically manifest as gastrointestinal bleeding, intussusception and bowel obstruction.[1,4]

Asymptomatic lipoma requires only monitoring whereas symptomatic lipoma requires treatment such as endoscopic or surgical resection. Invasive management is not advised unless complications arise such as intussusception, obstruction, bleeding or perforation leading to peritonitis.[5]

We present a case of subacute intestinal obstruction with colicky abdominal pain due to small bowel tumours which was preoperatively diagnosed by CT scan as submucosal lipomas. Patient subsequently underwent exploratory laparotomy with intra-operative enteroscopy for the same. Histopathological examination later confirmed the diagnosis of multiple submucosal lipomas in resected segment of ileum.

CASE REPORT

A 54-year-old gentleman presented with features of colicky abdominal pain from last 15 days. Pain was present in right lower quadrant. It was acute, intermittent, colicky and non-radiating with no precipitating factors. It was associated with abdominal distention for short period of time. Not associated with fever, melena, vomiting, jaundice, bleeding per rectum or altered bowel habits.

On examination, vital parameters were found to be in normal limits. Abdominal examination revealed tenderness in right lower quadrant of abdomen with no other specific findings. Abdomen was soft with no organomegaly. Per rectal examination had no obvious finding.

On admission, primary investigations were done. X-ray abdomen and ultrasonography were unremarkable. However, CT abdomen revealed multiple submucosal lipomas in ileum, largest measuring 18-19 mm with no

evidence of intussusception. Rest bowel loops appeared unremarkable (Figure 1 and 2).

Figure 1: CT scan showing submucosal lipomas in ileum in axial section.

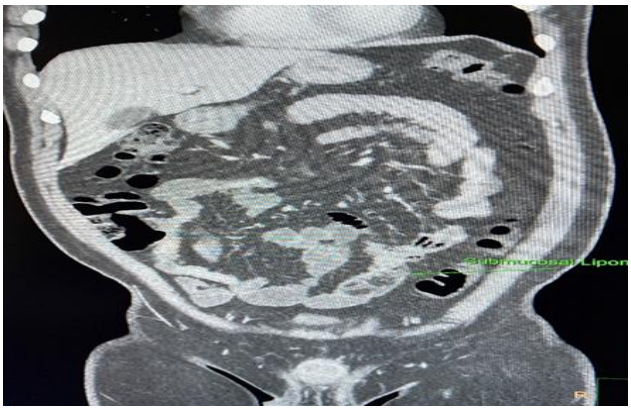

Figure 2: CT showing multiple lipomas in coronal section.

Patient was planned for exploratory laparotomy with intra-operative enteroscopy. Intra-operative enteroscopy was carried out to identify the extent of involved bowel. It showed multiple submucosal lipomas in mid-ileum of varying size with largest measuring around 4 cm. Involvement was limited to mid-ileum and rest of the bowel was free from any growth. Mucosal surface was intact and there was no active bleeding (Figure 3).

Figure 3: Intra-operative endoscopy/enteroscopy showing multiple submucosal lipomas in small bowel.

Resection anastomosis of involved segment of bowel with 5 cm margin on either side was done. Cut section of resected specimen showed multiple lipomas with intact overlying mucosa, typical of submucosal lesion (Figure 4).

Figure 4: Resected segment of ileum cut open to show multiple submucosal lipomas.

Histopathological examination of specimen confirmed the diagnosis of benign submucosal lipomas.

Post-operative course was uneventful. Patient was discharged and followed up for 3 months and was completely symptom free.

DISCUSSION

Gastro intestinal lipomas are benign tumours of mesenchymal origin. The incidence of gastro-intestinal lipomas is reported up to 5%. Occurrence is most common in the colon (65-75%) but they can be found in small intestine (20-25%) and very rarely in oesophagus and stomach (less than 5%).[6]

Most lipomas are asymptomatic but sometimes produce symptoms like gastro-intestinal bleeding, intussusception or obstruction. Large lipomas (more than 2 cm) are most likely to cause symptoms, so they may be mistaken for malignant lesion. The symptoms of submucosal lipomas are not specific and shared with other gastrointestinal disease thus the correct diagnosis may be difficult to reach.[6]

Imaging and endoscopic examination contribute to the preoperative diagnosis of intestinal lipomas. CT is the most valuable diagnostic method for intestinal lipomas. It can clearly reveal the typical characteristics of uniform tumour density and fat density, allowing for definite diagnosis. CT scan may also reveal associated intussusception if present.[6]

Asymptomatic lipomas need no treatment. Symptomatic lipoma usually requires surgical intervention. The localised, small, solitary lipoma can be easily and safely removed using endoscope such as endoscopic mucosal resection (EMR), unroofing technique, endoscopic mucosal resection after pre-cutting (EMR-P), endoscopic

mucosal dissection (EMD).[5] Surgical resection is recommended in patients with symptomatic lipoma to relieve symptoms and to exclude malignancy. Surgical treatment has been treatment of choice for large submucosal lipomas.

CONCLUSION

Multiple small bowel submucosal lipomas are very rare. It remains undiagnosed if asymptomatic or get diagnosed incidentally. Usually large and multiple lipomas cause symptoms. Contrast enhanced CT scan is the investigation of choice. Although, endoscopy is also very useful. Asymptomatic lipomas do not need any intervention whereas symptomatic submucosal lipomas require surgical intervention.

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