

Case Report

COMPUTER TOMOGRAPHY OF A RARE CASE OF DIFFUSE INTESTINAL LIPOMATOSIS WITH CARCINOMA COLON

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ABSTRACT

Intestinal lipomatosis is a relatively rare clinical entity. Case of intestinal lipomatosis with carcinoma colon making this still rarer. Intestinal lipomatosis is most often diagnosed because of its complications like intussusception or bowel obstruction. Here we present a case of 47 year male presenting with recurrent pain abdomen for long time with recent onset rectal bleeding. Patient was sent for CT scan which revealed an irregular concentric ascending colon mass with perirectal fat infiltration with lipomatosis of small gut extending from stomach to ileum. Although intestinal lipomatosis can cause recurrent pain abdomen, intussusception or intestinal haemorrhage, presentation with carcinoma colon is a rarer entity.

Keywords: *Lipomatosis, Carcinoma, Colon, Small Intestine*

INTRODUCTION

Diffuse lipomatous involvement of the gastrointestinal (GI) tract is a relatively rare condition with less than a dozen reported cases but presentation associated with colonic malignancy has not been described earlier.

CASES

47 year old Indian male presenting with recurrent pain abdomen for long time with recent onset rectal bleeding. Digital rectal examination was normal. Patient was sent for contrast enhanced CT scan of abdomen which was performed in a 128 slice CT scanner, examination was performed in plain, oral contrast and iv contrast examinations. Study revealed concentric thickening of 10-15mm of caecum and ascending colon with pericolic fat space infiltration, perirectal and mesenteric lymphnodes (figure 1).



Figure 1: Axial CECT post contrast scan reveal concentric ascending colon mass (solid arrow), ileal lipomas are seen superior to it (open arrow)

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Diffuse fat infiltration was also seen in submucosal space of stomach and multiple fat attenuation polypoidal lesions in duodenum, jejunum and ileum (figure 2, 3). Based on above findings malignant colonic mass with diffuse intestinal lipomatosis diagnosis was made. Patient was again sent for colonoscopy and guided biopsy which revealed adenocarcinoma of colon.



Figure 2: Axial post contrast CT reveals multiple lipomas in stomach one being extending in pylorus (arrows)

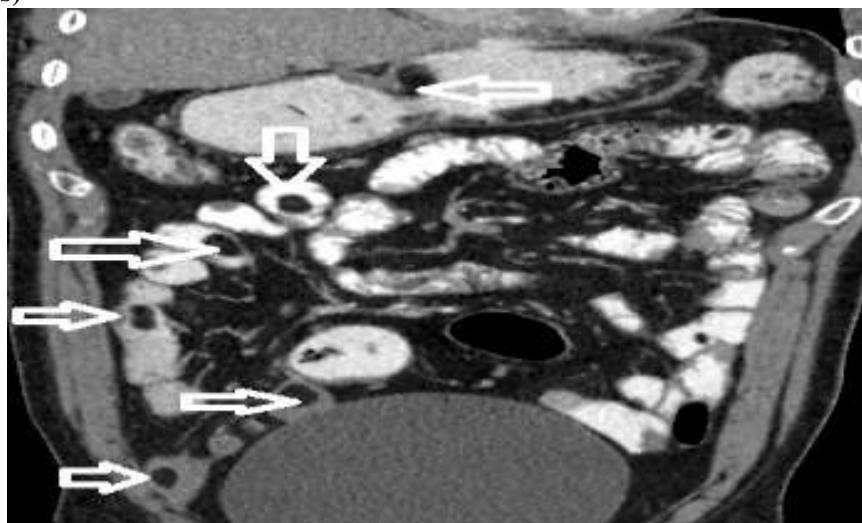


Figure 3: Post contrast CT coronal section reveal multiple ileal loop showing fat attenuation polypoidal sol s/o lipomas (arrows)

DISCUSSION

Although described more than a century ago by Hellstom in 1906 small intestinal lipomatosis are relatively rare. Intestinal lipomatosis is a rare disease with an incidence at autopsy ranging from 0.04 to 4.5%. The term lipomatosis has been used to describe the presence of numerous circumscribed lipomas in the intestine (Shenoy *et al.*, 2003; Tani *et al.*, 1998). Case reports of lipomas in isolated or scattered segments are most frequently encountered in the literature. The ileum is the most commonly affected site (Yakabe *et al.*, 1998). There is no satisfactory explanation for the etiology of gastrointestinal lipomatosis (Yakabe *et al.*, 1998). No gender predilection is observed (Tatsuguchi *et al.*, 1999). Intussusception or intestinal obstruction is a frequent clinical presentation. The most frequent presenting symptom is

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abdominal pain (Shenoy *et al.*, 2003). Simultaneous lipomatosis and diverticulosis has been documented (Yakabe *et al.*, 1998). Melena usually occurs from intussusception or ulceration of lipomas (Shenoy *et al.*, 2003; Yakabe *et al.*, 1998). Some patients with lipomatosis have a familial history, suggesting an autosomal dominant inheritance (Yakabe *et al.*, 1998). Hypercholesterolemia has also been reported often (Yakabe *et al.*, 1998). Lipomatosis usually occurs after the fourth decade of life. Yakabe *et al.* documented six cases and reviewed a total of 23 cases with an age distribution ranging from 20 to 88 years (Yakabe *et al.*, 1998). Fatty lesions characteristic of this condition are usually submucosal in location but may extend to the mesenteric or serosal fat. Gross specimens appear monomorphic and hamartomatous, and mature adult type fat cells are invariably present on histology (Devlies *et al.*, 1997; Duun, 1994).

Association with colonic malignancy has not been described in any previous literature making this case very rare and interesting. Fluoroscopy examination with contrast is the traditionally accepted primary diagnostic study. However, CT has become recognized as an appropriate alternative due to the unambiguous imaging findings and the ease in which the study is obtained. CT demonstrates well-defined, homogeneous fatty lesions in the gastrointestinal wall. Once diagnosed by CT, more invasive studies are unnecessary in the absence of other symptoms. Because of the potential complications, awareness of gastrointestinal lipomatosis in a patient can be clinically useful for the treating physician.

Conclusion

Benign tumors of the small bowel are relatively rare; with lipoma being the most common type. The case reported here is considered to be unusual because stomach, duodenum, jejunum and ileum were affected with diffuse lipomatosis with ascending colon malignant mass which makes it still rarer.

REFERENCES

- Shenoy R, Rodríguez G, Gopashetty M, Kannaiyan L and Rao S (2003). Segmental jejunal lipomatosis: a rare cause of intestinal obstruction. *Yonsei Medical Journal* **44**(2) 359–361.
- Tani T, Hajime A, Hiroaki T and Masashi K (1998). Lipomatosis of the ileum with volvulus: report of a case. *The Japanese Journal of Surgery* **28** 640–642.
- Yakabe S, Muranaka T, Sumii T, Takeshita M, Yamashita T, Tsuruta S, Saku M and Yoshida K (1998). Jejunal lipomatosis with diverticulosis: report of a case. *The Japanese Journal of Surgery* **28** 846–849.
- Tatsuguchi B, Fukuda Y, Moriyama T and Yamanaka N (1999). Lipomatosis of the small intestine and colon associated with intussusception in the ileocecal region. *Gastrointestinal Endoscopy* **49** 118–21.
- Duun S (1994). Lipomatosis of the small intestine. *European Journal of Surgery* **160** 311–312.
- Devlies F, Hoe LV, Leemans A, Ponette E and Paepe ID (1997). Gastroduodenal lipomatosis. *European Radiology* **160** 311–312.