MEGA-ILEUM DUE TO EXTENSIVE LIPOMATOSIS

Zaki Hussain, Naeem Shahid, Muhammad Misbah Rashid

Combined Military Hospital Rawalpindi, Pakistan

ABSTRACT

Intestinal lipomatosis is a rare disease. Very few cases have been reported and no case has ever been reported in local literature. We report a rarity where extensive lipomatosis is the cause of mega-ileum. The patient presented with incisional hernia and protuberant abdomen. He underwent surgery during which he was found to have this rare and unusual condition.

Keywords: Extensive lipomatosis, Mega-ileum, Small intestine.

INTRODUCTION

Gastrointestinal submucosal lipomas are infrequent tumors comprised of well-differentiated adipose tissue inside a fibrous capsule. Most cases are asymptomatic. Symptomatic cases (<33%) present as intestinal obstruction, volvulus, intussusception, ulceration and haemorrhage. Lipomatosis is a term used to describe focal proliferation of normal fat in the soft tissues[1]. The fat that accumulates in the organs is histologically normal and not a part of a neoplastic process[2] Intestinal lipomatosis is a rare disease with an incidence at autopsy ranging from 0.04 to 4.5%[2].

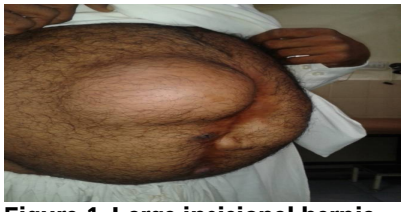

Figure-1: Large incisional hernia.

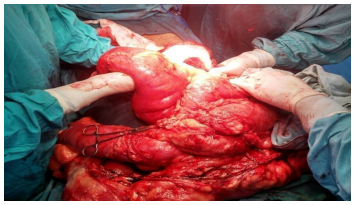

Figure-2: Massive small gut loops.

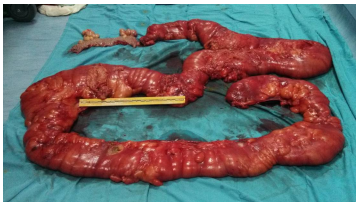

Figure-3: Resected specimen.

Few cases have been reported in the medical literature. No case has been reported in local literature where lipomatosis is as extensive as in our case. Even in international literature only one case of extensive lipomatosis of small intestine is reported, but no one has reported it to be a cause of mega-ileum[3].

CASE STUDY

A 33 year old male presented with a 9 years history of disfiguring lump in the upper part of old midline incisional scar, progressively increasing in size. In the past he was operated three times. First in 1996 for acute intestinal obstruction due to volvulus of small intestine, resection and anastomosis was done. Second in 2004 again for intestinal obstruction (not much operative details were available), third in 2003 for mass in upper laparotomy scar, an incisional hernia which was reduced and repair was performed as per patient (no details of surgery available).

He had no other complaints like vomiting, Fever, Jaundice, Dysphagia, Cough, Urinary Tract Infections and Constipation.

On examination, there was a non-tender lump which was reducible.

The vital signs were within normal limits and the rest of general and systemic examination revealed no abnormality.

On the basis of history and examination a provisional diagnosis of recurrent incisional hernia was made. Abdominal ultrasonography revealed "target" masses of varying sizes. Abdominal computed tomography scan was carried out which revealed multiple fat density tumors in jejunum and ileum. After relevant routine investigations and preanaesthetic assessment mesh repair hernioplasty was

Correspondence: Dr. Zaki Hussain, Classified Surgical Specialist, CMH Rawalpindi, Pakistan
Email: zakihussain@hotmail.com

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planned. During Surgery when hernial sac was opened and abdominal cavity entered, small gut was found massively dilated from three feet distal to Duodenojejunal junction to two and half feet proximal to Ileocaecal junction.

After removing adhesions, duodenojejunal junction and Ileocaecal junction were identified. Decision was made to remove these massive small gut loops (13 feet in length, on an average 1 foot in diameter and 29 kg in weight). Small gut mesentery ligated at multiple sites and divided and abnormal small gut was resected.

Resected portion, on opening contained large lipomatous lumps. Jejuno-ileal anastomosis was made at the end.

Postoperatively the patient remained well, recovery was uneventful and his vital signs remained stable. On 3rd post op day oral fluids were started. On 5th post op day abdominal drains were removed. On 7th post op day patient was discharged and on 12th post op day abdominal skin staples were removed.

Histopathology report was suggestive of "Small Gut Lipomatosis"

DISCUSSION

The term intestinal lipomatosis, first reported by Hellstorm[4,9] in 1906, has been used to describe diffuse, multiple and circumscribed lipomas in the intestine[5,6]. This disorder is extremely rare. Only 32 such cases are found in literature[1]. In 12 to 15 cases segmental dilatation of ileum was found[8]. Ours is a unique case where dilatation is this much extensive. No case is reported in local literature.

Small Gut Lipomatosis is a term used to describe focal proliferation of normal fat in soft tissue. Lipomata are benign tumors of mesenchymal origin. They are the second most common benign tumors in the small intestine and account for 10% of all benign and 5% of all gastrointestinal tumors. They are predominantly submucosal and protrude into the lumen. Occasionally, they arise in the serosa.

Gastrointestinal lipomas are most commonly located in the colon (65% to 75%, especially on the right side), small bowel is the second most common site[1,7] (20% to 25%) and occasionally in the foregut (< 5%) .Lipomas of small bowel show no sex predominance. It usually occurs after the fourth dacade of life, but the age distribution ranges widely from 20 to 88 years (mean 47 years)[5]. In patients with lipomatosis of small bowel, diverticulosis and intussusceptions frequently occur[5].

Pathologically the proliferation of fat cells may be confined to the submucosa or may extend to the mesenteric and serosal fat. The muscularis properia is not usually affected[6].

Clinical presentation is non-specific which makes this a difficult condition to diagnose. Patient can complain of abdominal pain, nausea, and diarrhea. The condition usually present with intussusception.Rarely, this can present with acute intestinal obstruction[8].

In management, resection of involved segment should be carried out only if the pre-operative diagnosis of benign etiology is confirmed and the remaining small bowel is viable which is then anastomosed.Resecting massive lengths of small bowel has the risk of short gut syndrome as a sequel.

CONFLICT OF INTEREST

The authors of this study reported no conflict of interest.

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