CASE REPORT

Small Intestinal Multiple Lipomatous Polyps: A Cadaveric Case Report

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Abstract:

Multiple lipomatosis has been reported to occur in males in between 4th and 6th decade of life. Most occur in the ileum and ileoceacal region with a small number in jejunum. Most common mode of presentation is intussusception with small bowel obstruction. While performing the routine abdominal dissection by undergraduate students at B.I.M.S. Belgaum, the authors came across a middle aged male cadaver having multiple sessile polyps of varying sizes from 10 mm to 20 mm in the lumen of entire length of ileum and distal part of jejunum with normal rest of the gut.

Key words: Multiple Lipomatous Polyps, Intestinal Obstruction, Intestussusception, Small Bowel Submucosal Lipomas, Peutz Jeghers Syndrome.

Introduction:

The small bowel lipomatous polyps are benign submucosal tumors of mesenchymal origin. These tumors are often located in the ileum and may frequently develop as pedunculated or sessile submucosal lesions. They may grow undetected to a size sufficient to produce symptoms of colicky abdominal pain and intermittent bowel obstruction. Benign tumors of small bowel are rare clinical entities that often remain asymptomatic throughout life. These tumors are generally characterized by slow growth and delayed clinical presentation [1]. Clinically benign small bowel lesions are characterized by lack of identifying symptoms. Possible signs and symptoms are non-specific, dull, intermittent abdominal pain, constipation, malena, nausea, diarrhoea, vomiting, anaemia, palpable mass (if size > 6cm). Small bowel lipoma (notably those > 4cm) can produce intussusception [1]. Surgery is usually the treatment of choice for symptomatic gastrointestinal lipoma with laprotomy and resection of affected intestinal segment [2].

Case History:

While performing routine abdominal dissection in the Department of Anatomy, the authors came across a middle aged male cadaver having multiple sessile, intraluminal polyps of varying sizes from 10 mm to 20 mm in the lumen of entire length of ileum and distal part of jejunum. The entire intestine from duodenum to rectum was properly studied for the presence of such intraluminal polyps. After thorough wash, a segment of gut from duodenum, jejunum, ileum and colon were sent for histopathological studies. Relevant photographs were taken and affected part of the intestine was preserved in formalin. As shown in fig.1, the external appearance of small intestine was completely normal. The cut section showed 8–10 scattered polyps in the entire length of jejunum (Fig. 2). They were of varying sizes from 10mm to 20mm. Most of them were sessile. Polyps were

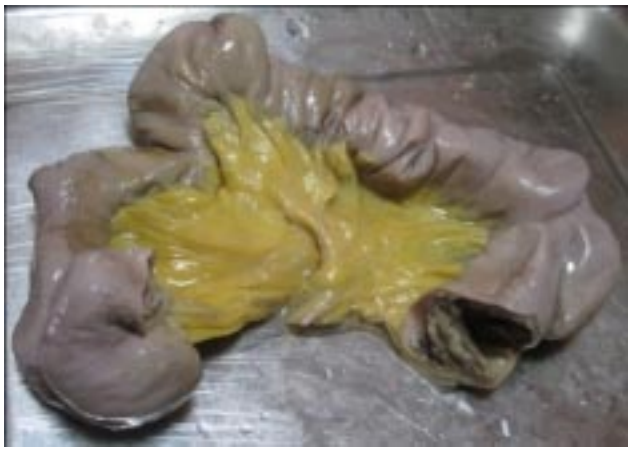

Fig. 1 – Showing External Features of Small Intestine

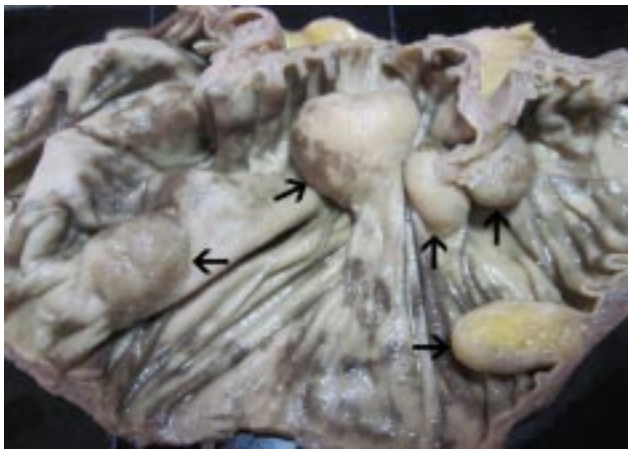

Fig. 2 – Showing Cut Section of Small Intestine with Polyps (Arrows)

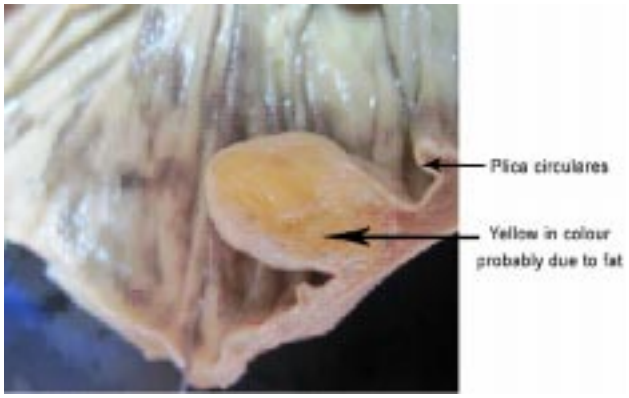

Fig. 3 – Showing Cut Section of Polyp

having smooth, non-ulcerative, non-hemorrhagic surfaces. Plica circularis were not extending on the surface of the polyps but was normal elsewhere. Non affected part of small intestine and whole of large intestine showed normal external and internal features. As seen in Fig. 3, the cut section of the polyp was yellowish in colour. The microscopic sections from different polyps showed sub mucosal lobulated lesions composed of mature adipose tissue. Lobules were separated by delicate fibrovascular septae.

Discussion:

Benign tumors of small bowel are rare clinical entities that often remain asymptomatic throughout the life [3, 4]. They are of several subtypes which include hyperplastic polyps, adenomas, GI stromal tumors, lipomas, hemagiomas and those associated with Peutz-Jeghers syndrome [5]. These tumors are generally characterized by slow growth and delayed clinical presentation [3] and are found throughout the small intestine including duodenum, jejunum and ileum, in the order of increasing frequency. They may occur as single, multiple or wide spread, either intraluminal or serosal lesions. Intraluminal lesions are most often associated with development of secondary bowel obstruction and intussusception while serosal lesions are linked to small bowel volvulus [1, 3]. Multiple lipomatosis has been reported to occur more in males between 4th and 6th decade of life with a small number in jejunum, commonly in association with diverticulosis and volvulus [6]. Lipomas are usually solitary of varying sizes from 1 to 30cm [1]. Lipoma accounts for 4% of all benign tumors of gut mostly involving large intestine around

ileocaecal valve, usually submucosal [7]. Small bowel lipomas are benign submucosal tumors of mesenchymal origin with no malignant potential mostly located in ileum. They may be sessile or ependymal and may grow undetected to a size sufficient to produce symptoms of abdominal colicky pains and intermittent bowel obstruction including intussusceptions [8].

Clinically small bowel lipomas are characterized by lack of identifying symptoms with possible presentation of abdominal pains, constipation, malena, nausea, diarrhoea, vomiting, palpable mass, early satiety, anaemia, volvulous, perforation, intussusceptions, etc [8]. Signs and symptoms of intussusception are also vague – abdominal pain is the most frequent [1]. In a study by Sharmana Mandal et al [7], three out of four adults with intussusceptions have had a single submucosal sessile lipomatous polyp involving small intestine measuring 1 to 3cm. Diagnosis of sessile lipomatous polyps is difficult. Plain radiographic films of abdomen are frequently normal. Larger lesions may demonstrate signs of complete or partial small bowel obstruction (e.g.: dilated small bowel, air-fluid levels). Barium contrast study may show intra wall filling defect. Ultrasonography of abdomen may demonstrate larger tumors (> 4cm). Tumors larger than 2cm are imaged successfully by abdominal computerized tomography scan with characteristic masses of fat density [9]. Intraoperative enteroscopy is an effective technique for simultaneous palpation and visualization of the small bowel [3]. Capsule endoscopy (though contra indicated in intestinal obstruction) could be very helpful in cases with long standing abdominal pain and negative radiological examination either CT or barium [10]. Surgery is usually the treatment of choice for symptomatic gastrointestinal lipomas with laprotomy and resection of affected intestinal segment [2]. Fortunately, in small bowel submucosal lipomas malignant transformation has never been reported [3].

Clinical Significance:

Despite being considered a rare pathology, knowledge of lipomatous polyps of small intestine is important for surgeons, gastroenterologists, general practitioners and even for radiologists for diagnostic interpretation. Gastrointestinal lipomatosis should be regarded as a possible diagnosis when patient presents with GI bleeding, abdominal pains secondary to small bowel obstruction or intussusception. The typical radiological findings as smooth surfaces with non ulcerative filling defect make it possible to provide a peri-operative diagnosis in a middle aged patient, while considering this rare entity.

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