

Colocolic intussusception in a patient with a giant colonic lipoma

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ABSTRACT

A 37-year-old man presented with chronic non-specific gastrointestinal tract symptoms including rectal bleeding. Colonoscopic examination showed a mass-like lesion in the descending colon with ulcerated surface. However, the pathological examination of biopsy taken from the lesion did not reveal any neoplastic process. Abdominopelvic computed tomography scan showed a giant transverse colon lipoma with suspicious feature of intussusception in descending colon which had a mass-like appearance on colonoscopy. The patient underwent surgical intervention, with a successful recovery after surgery.

Key words: Adult colocolic intussusception, Gastrointestinal lipoma, Intussusception

Intussusception in adults, although a rare condition, usually has an identifiable etiology. This is in contrast to common occurrence of idiopathic intussusception in pediatric population [1]. In adults, there is common evidence of an existing “lead point” for the invaginated part, which is rarely an intraluminal lipoma [2].

Gastrointestinal tract lipomas are rare. However, they are found to be the most common benign nonepithelial tumors of alimentary tract [3], frequently located in the large bowel [4], mainly in submucosal or subserosal area [1]. The diameter of these tumors sometimes exceeds 5 cm, which is defined as “giant lipoma” [5]. The lipomas are mostly asymptomatic. However, in some circumstances, they lead to abdominal pain, change in bowel habit, gastrointestinal bleeding, obstruction, and intussusception [3,6,7].

CASE REPORT

A 37-year-old man presented with a 4-week history of rectal bleeding. There was a gradually worsening colicky left upper quadrant pain associated with 2 kg weight loss within this period. On examination, hemodynamic parameters were stable. The patient had no guarding or point tenderness in his abdominal area. No palpable masses were found. General examination was unremarkable. There was no significant medical, social, or drug history. All hematological and biochemical investigations were normal. Colonoscopic examination showed a 2 cm × 3 cm ulcerated polypoid lesion in the descending colon, 33 cm proximal to the anal verge (Fig. 1), which prevented further progression of the endoscope. A biopsy was obtained from the aforesaid lesion

that showed ulcerated colonic mucosa with regenerative changes and no evidence of neoplastic process.

Abdominopelvic computed tomography (CT) scan revealed an intraluminal large, round, homogeneous, hypoattenuated mass which represents a lipoma in the proximal portion of the transverse colon with the approximate diameter of 54 mm (Fig. 2a), and a mild-concentric wall thickening at the distal portion of the descending colon, an evidence of colocolic intussusception (Fig. 2b).

The patient underwent laparotomy. During the operation, the bowel wall was found to be edematous but viable. The lipomatous lesion of the transverse colon was resected successfully, and conclusive diagnosis of a submucosal lipoma of the transverse colon was achieved through histopathological examination (Fig. 3). In addition, the mass-like lesion found in the descending colon on colonoscopy was also resected and confirmed to be only a colocolic intussusception with no evidence of tumoral lesion. The patient had successful recovery after surgery and uneventful follow-up within 1 year post-operation.

DISCUSSION

Bowel intussusception in an adult is a rare condition presenting with non-specific and long-standing symptoms which may cause delay in diagnosis [8]. There is often an organic etiology found in adult colocolic intussusception which may be a benign or malignant lesion, with almost equal frequency [9]. Several cases of adult colocolic intussusception have been reported in association with colonic lipoma. In the review article by Azar and Berger [10], 57% of adult cases with colonic intussusception

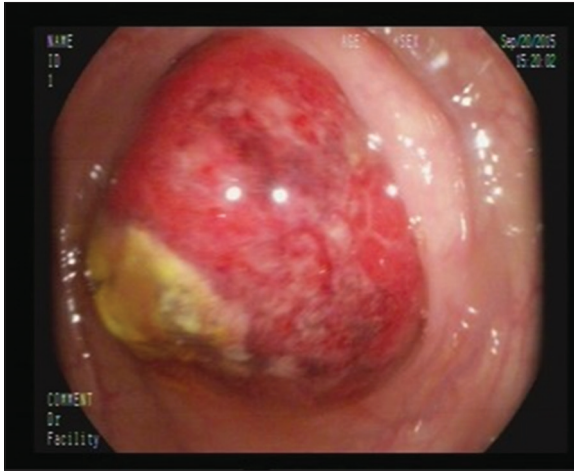


Figure 1: A polypoid lesion in the descending colon found on colonoscopy

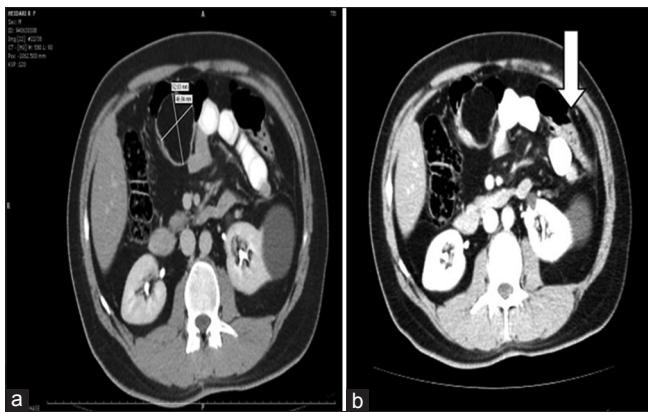


Figure 2: (a) Abdominopelvic computed tomography scan. A lipoma in the transverse colon just distal to the hepatic flexure. (b) Mild-concentric wall thickening at the distal portion of the descending colon, an evidence of colocolic intussusception (arrow)

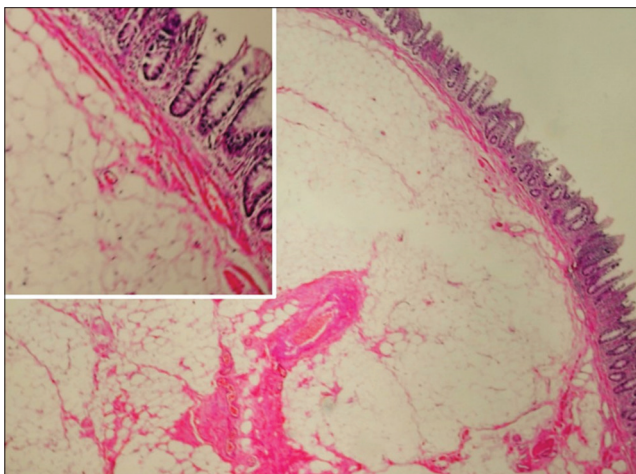


Figure 3: Microscopic feature of the lipoma of transverse colon. Lobules of mature adipocytes are seen in submucosa of colonic tissue (H and E, $\times 40$)

had a benign lesion such as lipoma, adenoma, and lymphoid hyperplasia and 43% of cases harbored a malignant neoplasm, all of which were adenocarcinoma.

Our case presented with non-specific gastrointestinal tract signs and symptoms and found to have a mass-like lesion in descending colon on colonoscopic examination. However, the

pathological examination of the taken biopsy did not reveal any neoplastic process. Further investigation by abdominopelvic CT scan showed a giant lipomatous mass in transverse colon and wall thickening in the descending colon suggestive of intussusception.

Since large colonic lipomas are rare and may have variable clinical presentation, they may cause confusion with more serious lesions. Therefore, diagnosis before surgery is important and needs more attention [11]. Lipomas have relatively typical characteristic feature on CT scan, and this diagnostic modality should be considered in suspected cases before surgical intervention [12]. No treatment is usually indicated for majority of cases, especially for asymptomatic and small size lipomas. However, a small proportion of them, mostly those with more than 2 cm diameter, may become symptomatic [13], with a rare complication of intussusception [14].

According to Jiang et al., surgery is indicated for the lipoma of more than 4 cm diameter, complicated lipoma such as those associated with intussusception, when there is no clear diagnosis prior to surgery, and involvement of muscularis propria or serosa, when there is limitation for complete resection through colonoscopy [15].

CONCLUSION

This case highlights that the possibility of colonic intussusception should be borne in mind when facing an adult patient with chronic and non-specific gastrointestinal tract symptoms and it may even appear as a mass-like lesion on colonoscopy. In adult intussusception, an organic lesion is identifiable in most cases and proper diagnostic modality should be applied to increase the accuracy of pre-operative diagnosis and to prevent unnecessary radical resection.

REFERENCES

- Mason R, Bristol JB, Petersen V, Lyburn ID. Education and imaging. Gastrointestinal: Lipoma induced intussusception of the transverse colon. *J Gastroenterol Hepatol*. 2010;25(6):1177.
- Ongom PA, Wabinga H, Lukande RL. A 'giant' intraluminal lipoma presenting with intussusception in an adult: A case report. *J Med Case Rep*. 2012;6:370.
- Jelenc F, Brencic E. Laparoscopically assisted resection of an ascending colon lipoma causing intermittent intussusception. *J Laparoendosc Adv Surg Tech A*. 2005;15(2):173-5.
- Avilés-Salas A, Cuéllar-Mendoza ME. Submucosal lipoma of the colon with intussusception. *Acta Gastroenterol Latinoam*. 2012;42(3):216-9.
- Ullah S, Ahmed H, Jehangir E. Giant colonic lipoma presenting with intermittent intestinal obstruction. *J Coll Physicians Surg Pak*. 2012;22(12):792-3.
- Lee CS, Lee MJ, Kim KL, Kim YS, Baik GH, Kim JB, et al. A case of giant lipoma causing chronic recurrent intussusception of the colon. *Clin Endosc*. 2012;45(2):165-8.
- Ruiz-Tovar J, López-Delgado A, Santos JE, Arroyo A, Calpena R. Laparoscopic treatment of sigmoid colon intussusception secondary to giant submucosal lipoma. *Acta Gastroenterol Latinoam*. 2013;43(1):36-8.
- Yalamarathi S, Smith RC. Adult intussusception: Case reports and review of literature. *Postgrad Med J*. 2005;81(953):174-7.
- Son DN, Jung HG, Ha DY. Laparoscopic surgery for an intussusception caused by a lipoma in the ascending colon. *Ann Coloproctol*. 2013;29(2):80-2.
- Azar T, Berger DL. Adult intussusception. *Ann Surg*. 1997;226(2):134-8.

11. Sarker S. Lipoma of the descending colon causing acute large-bowel intussusception. *Internet J Surg.* 2009;22(1):1-3.
12. Rogy MA, Mirza D, Berlakovich G, Winkelbauer F, Rauhs R. Submucosal large-bowel lipomas - Presentation and management. An 18-year study. *Eur J Surg.* 1991;157(1):51-5.
13. Kim CY, Bandres D, Tio TL, Benjamin SB, Al-Kawas FH. Endoscopic removal of large colonic lipomas. *Gastrointest Endosc.* 2002;55(7):929-31.
14. Rogers SO Jr, Lee MC, Ashley SW. Giant colonic lipoma as lead point for intermittent colo-colonic intussusception. *Surgery.* 2002;131(16):687-8.
15. Jiang L, Jiang LS, Li FY, Ye H, Li N, Cheng NS, et al. Giant submucosal

lipoma located in the descending colon: A case report and review of the literature. *World J Gastroenterol.* 2007;13(42):5664-7.

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