

Colo-colic Intussusception due to Large Colonic Lipoma : A Case Report¹

Hyun-Chul Rhim, M.D., Yong-Soo Kim, M.D., Bong-Soo Kim, M.D., Soon-Young Song, M.D.,
Won-Jin Moon, M.D., Buyng-Hee Koh, M.D., On-Koo Cho, M.D.

Colonic lipomas are the second most common benign tumor of the large bowel ; because they are small, they are usually asymptomatic. If there is bleeding or obstruction, however, surgical management is mandatory. These tumors may have a broad-based pedicle, and their diameter is usually less than 3cm. We report a case of colo-colonic intussusception due to certain unique features of this colonic lipoma ; a narrow pedicle, giant size, and severe necrosis.

Index Words : Colon, neoplasms
Intussusception
Lipoma and lipomatosis

Colonic lipomas are the second most common benign tumor of the large bowel, although they occur relatively rarely (1). Because they are small, they are usually asymptomatic, but may require surgical or endoscopic removal if symptoms or complications develop (2). We report a case of colo-colonic intussusception due to colonic lipoma showing a narrow pedicle, giant size, and severe necrosis.

Case Report

A 45-year old female was admitted after 10 days of left lower quadrant pain. Other than intermittent abdominal pain which had begun three months earlier, she had no previous history of gastrointestinal disease, and, routine laboratory tests were normal. Barium enema examination (Fig. 1A) revealed an intussusception in the distal descending colon, and after this was reduced, a 7×4cm elongated intraluminal filling defect was found at the splenic flexure (Fig. 1B). The mass had a smooth margin and relatively narrow pedicle. After barium reduction, the symptom was markedly relieved. Ultrasonography (Fig. 2) showed a large hyperechoic mass in the left upper quadrant. Com-

puted tomography (Fig. 3) showed a sharply demarcated, ovoid lesion in the proximal descending colon ; its mass showed low attenuation (mean coefficient was about -40H.U.), and internal streaky densities were seen. Limited resection of the colon was performed, and the specimen was a typical submucosal mass, about 8×4×3cm in size, and with adipose tissue, fibrovascular stroma and severe necrosis (Fig. 4). It was diagnosed as a colonic lipoma.

Discussion

Colonic lipoma is an uncommon tumor which rarely causes symptoms. If there is associated bleeding or obstruction, however, surgical management is mandatory (1, 2). Our case is a relatively typical colonic lipoma with associated intussusception ; certain unique features were present, however, namely a narrow pedicle and severe necrosis.

Although a sessile or pedunculated mass with sharply demarcated margin was seen on barium enema examination, this feature is not specific to colonic lipoma (3-5), other submucosal tumors are therefore difficult if only the barium-based procedure is used. According to Kawamoto et al. (3), a pedunculated lesion with a smooth or granular appearance is suggestive of lipoma, lymphangioma, or hemangioma, while a broad based sessile lesion can be seen in almost all submucosal tumors, including lymphoma, carcinoid, leiomyoma,

¹Department of Diagnostic Radiology, College of Medicine, Hanyang University
Received April 30, 1997 ; Accepted July 21, 1997
Address reprint requests to : Hyun-Chul Rhim, M.D., Department of Diagnostic Radiology, College of Medicine, Hanyang University, # 17 Haengdang-Dong, Sungdong-ku, Seoul 133-792, Korea.
Tel. 82-2-290-9160 Fax. 82-2-293-2111 E-mail. rhim@nuri.net

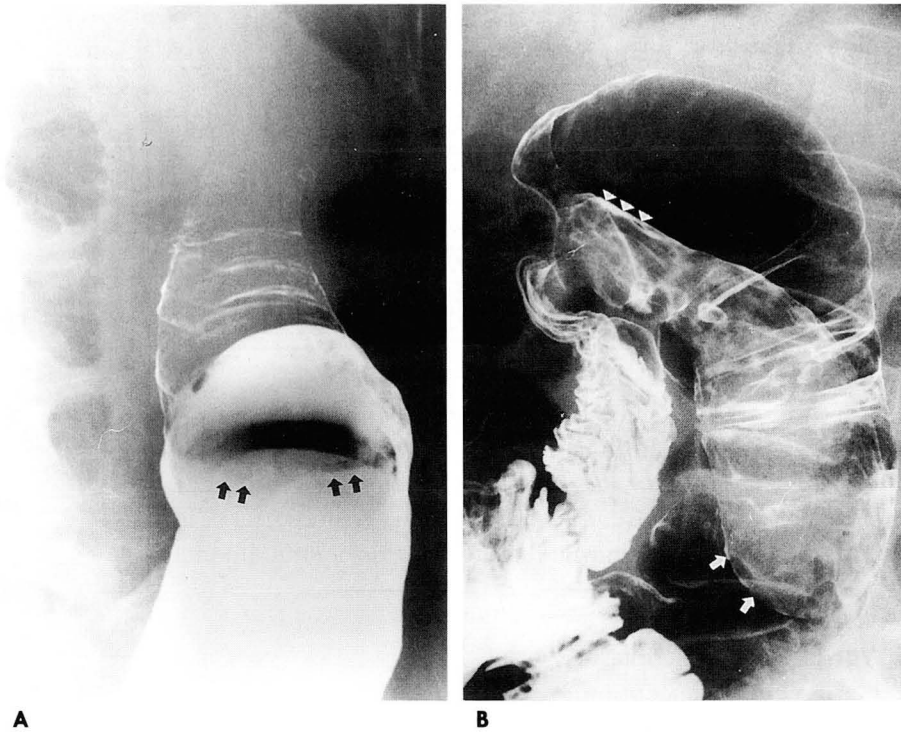


Fig. 1. Barium enema

A. Barium enema demonstrates an intussusception (arrows) in the mid-descending colon.

B. After reduction, a 4×7cm elongated intraluminal filling defect (arrows) with relatively narrow pedicle (arrow heads) at the splenic flexure is noted.

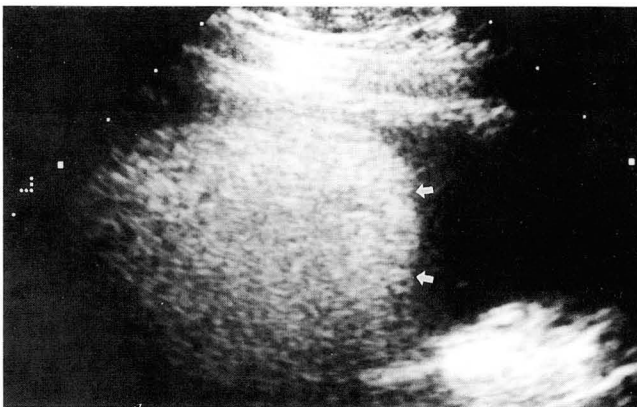


Fig. 2. Ultrasound

Ultrasonography shows a homogeneously hyperechoic mass (arrow) at proximal descending colon.

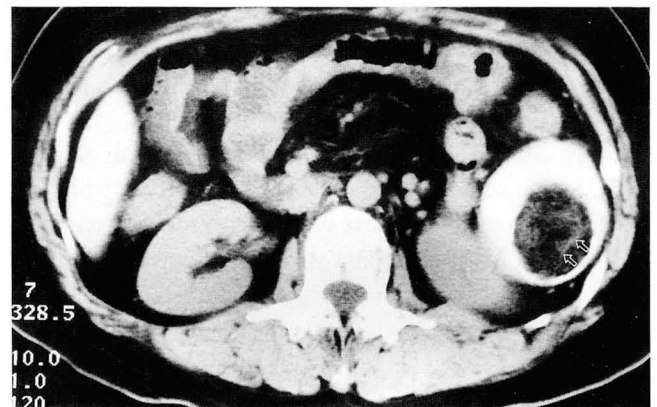


Fig. 3. Postenhanced CT scan

CT scan shows a sharply demarcated, ovoid mass with mean attenuation value of -40H.U. in the proximal descending colon. There is increased streaky densities (arrows) within the mass which represent a fibrovascular stroma.

and hemangioma. The diagnostic finding on barium enema examination and the shape of the lesion are not constant (4), but in our case, the mass showed a definite sign of pliability.

It is known that larger lipoma are often pedunculated, and the pedicle is characteristically broad, often similar in size to the head, and usually broader than in adenomatous polyps (5). In our case, however, the pedicle was relatively narrow, despite the large size of the mass. Severe necrosis in colonic lipoma, which may be related to the sequelae of chronic vascular compromise caused by

recurrent intussusception, has not been reported in the literature.

The ultrasonic features of this benign tumor may be characteristic, whether or not there is associated intussusception. Because of its unique tissue attenuation coefficient, however CT may provide a definite diagnosis of lipoma (6, 7). On CT scan, this tumor appears as a mass of uniform fat, the density of which ranges from -5 to -120H.U. Our case suggests that the internal density of the mass depends on the composition of fatty tissue and fibrovascular stroma.

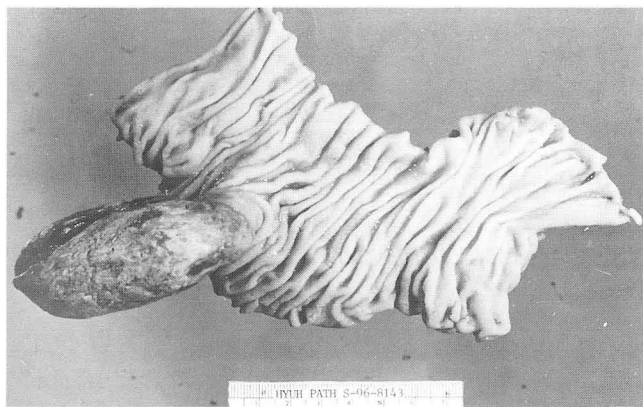


Fig. 4. Gross specimen
Resected specimen of the colon shows cut surface of a large pedunculated submucosal mass with adipose tissue and severe necrosis.

In contrast to childhood intussusception, underlying pathologic processes are identified in 18 to 91% of adult cases (7, 8). In adult intussusception, computed tomography is useful for the evaluation of principle cause, as in this case. We report a co-

lonic lipoma with intussusception showing giant size, narrow pedicle, and severe necrosis.

References

1. Castro DB, Sterns MW. Lipoma of the large intestine. *Dis Colon Rectum* 1972; 15: 441-444.
2. McGrew W, Dunn GD. Colonic lipoma; clinical significance and management. *South Med J* 1985; 78: 877-879.
3. Kawamoto K, Motooka M, Hirata N, et al. Colonic submucosal tumors; a new classification based on radiologic characteristics. *AJR* 1993; 160: 315-320.
4. Margulis AR, Jovanovich A. The roentgen diagnosis of submucosal lipoma of the colon. *AJR* 1960; 84: 1114-1120.
5. Davis SJ, Yoong MF. Characteristic appearance of colonic lipoma on barium enema: A guide to conservative treatment. *Australas Radiol* 1990; 34: 131-136.
6. Heiken JP, Forde KA, Gold RP. Computed tomography as a definite method for diagnosing gastrointestinal lipoma. *Radiology* 1982; 142: 409-414.
7. Wulff C, Jespersen N. Colo-colic intussusception caused by lipoma. Case reports. *Acta Radiol* 1995; 36: 478-480.
8. 천경아, 변재영, 이재문 등. 성인 장중첩증의 원인과 CT 소견. *대한방사선의학회지* 1993; 29: 239-243.

대한방사선의학회지 1997;37:885-887

거대 지방종에 의한 결장 장중첩증: 1예 보고¹

¹한양대학교 의과대학 진단방사선과학교실

임현철 · 김용수 · 김봉수 · 송순영 · 문원진 · 고병희 · 조은구

결장 지방종은 선종에 이어서 두 번째로 많은 결장의 양성종양으로서 대개 크기가 작기 때문에 증상이 없으나 출혈이나 장폐쇄가 동반 될 경우 수술적 치료가 필요하다. 결장 지방종은 크기가 대개 3 cm 이하 이면서 광경 (broad pedicle)을 갖는 것으로 알려져 있다. 저자는 장중첩증을 유발한 협경 (narrow pedicle)을 갖고 심한 괴사를 동반한 결장의 거대 지방종을 경험하였기에 보고한다.

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