Colonic Angiolipoma Presenting As Intussusception: A Rare Case Report

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ABSTRACT
Angiolipoma & lipomas are frequently observed benign neoplasms that are often located in the subcutaneous tissue but can rarely arise in the gastrointestinal tract. These tumors are usually asymptomatic but may present with abdominal pain, obstruction & at times bleeding. We report the case of a 55 year old male who presented with pain in the lower abdomen with a history of per rectal bleeding for 2 days & acute intestinal obstruction. Ultrasound examination of abdomen revealed an intussusception with a well defined echogenic focal lesion in the distal portion of the descending colon. Emergency laprotomy showed colo-colic intussusceptions & a submucosal mass as the lead point. Histopathological study showed characteristic features of an angiolipoma. We report this case to highlight the importance of correct pre & post operative diagnosis of this rare entity with a rare colonic involvement.

KEYWORDS: Colon angiolipoma, Intussusception, Gastrointestinal tract angiolipoma

INTRODUCTION
Angiolipoma was first described in 1912 by Bowen[1]. Howard in 1960 described the clinic-pathological characteristics of angiolipoma which differed from those of lipomas[2]. Angiolipomas commonly occur in the subcutaneous tissue & other locations with rare involvement of the large or small intestine[3,4,5]. Histologically it is composed of adipose tissue & proliferating blood vessels & may protrude as an intraluminal submucosal mass[4]. When angiolipoma is suspected, the pre & post operative diagnosis by histological examination is essential to perform an optimal surgical procedure[6].

We herein report this rare of colonic angiolipoma which presented as an acute case of intussusceptions confirmed by the histological examination highlighting this rare lesion in a rare site.

CASE REPORT
A 55 year old male patient came to our hospital with history of pain in the lower abdomen & bleeding per rectum for 2 days. He presented with features of acute intestinal obstruction. He had no history of vomiting or constipation. He was not a known case of Hypertension, Diabetes, Tuberculosis & was a known Alcoholic since 25 years. On examination, the patient was afebrile. He had tenderness in the left iliac fossa. There was no rigidity or guarding signs. His routine Blood/Urine/Liver & Kidney function tests were within normal limits. Serological tests for HIV & HBsAg were Non reactive.

Ultrasound screening revealed telescoping of bowel within bowel in the left iliac fossa with a well defined echogenic focal lesion in the distal portion of descending colon. The patient was taken up for an emergency laprotomy which revealed a colo-colic intussusceptions of the descending colon with a part of it showing gangrenous change. The lead point showed a submucosal mass of size 10x8x4 cm & the intraoperative diagnosis of a submucosal lipoma was considered. A segmental colonic resection with descending ileostomy was performed. The post operative period was uneventful. The specimen was sent for pathological study.

The specimen received showed a segment of descending colon measuring 9x6 cm with a pedunculated polyp measuring 6x5 cm. (Fig 1). Histological examination showed colonic mucosa with ulceration, hemorrhage, submucosal edema (Fig 2) & a polyp composed of dilated & congested blood vessels intermingled with mature fat cells arranged in irregular lobules (Fig 3 & Fig 4) with transmural inflammatory infiltrate. The final pathologic diagnosis was angiolipoma of the descending colon. No recurrences were recorded during follow up.
Fig 1: Gross Photograph showing cut opened, resected segment of colon showing a grey yellow pedunculated polyp of 6x5cm.

Fig 2: Photomicrograph showing colonic mucosa with ulceration, hemorrhage & submucosal edema (H&E, x100)

Fig 3: Photomicrograph showing a polyp composed of dilated & congested blood vessels intermingled with mature fat cells arranged in irregular lobules (H&E, x100)

Fig 4: Photomicrograph showing univacuolated adipose cells in the submucosa in lobules along with numerous thin walled vascular channels throughout the polypoid tumor (H&E, x400)

DISCUSSION

Angiolipoma was established as a new entity, wherein the tumor based on the ratio of adipose & vascular tissue composition as a predominant component could be classified as lipomatous or angiomatous type after the demonstration of the differences in the clinico-pathological features between angiolipoma & lipomas by Bowen in 1912, Howard & Helwig in1960[1,2].

Angiolipomas are benign tumors which usually develop as encapsulated subcutaneous tumors mostly on the arms & trunks of young adults. Rarely larger than 2cm in diameter, frequently multiple, characteristically tender or painful & are rarely found in the gastrointestinal tract[3,4,5,6].

In literature search only 23 angiolipomas in the gastrointestinal tract have been reported to date[3,7]. One was located in the esophagus, three in the stomach, two in the duodenum, six in small intestine, three in ileocecal valve, six in colon & two in the rectum[3,6,7]. Angiolipomas usually present as protruding intraluminal submucosal masses & symptoms are found in less than one half of the patients, usually due to intussusceptions, obstruction or hemorrhage[4,7]. Severe bleeding may occur
as hemetemesis, melena or occult blood loss resulting in chronic anemia have been reported[4,6,7].

Pre operative diagnosis by imaging vary depending upon the composition & fat density as seen in CT scanning[3,4,5,7]. Histologically colonic angiolipomas are characterized by colonic mucosa without dysplastic change with a benign submucosal proliferation of adipose cells & vascular channels throughout the tumor[5,7].

Immunohistochemistry tests have demonstrated CD31 positivity for endothelial cells & S100 protein for adipose cells with no immunoreactivity in neoplastic cells for H-Caldesmon, Smooth muscle actin, HMB45, Estrogen & Progesterone receptors[5]. The treatment of choice is surgical or endoscopic resection. Small pedunculated polyps may be removed under colonoscopy & for larger lesions or broad based polyps, surgical excision is the treatment of choice[3,4,5].

Minimally invasive procedures including laproscopic resection have been reported using laproscopy assisted ileocecostomy including a transanal approach[3]. Urgent treatment is indicated with those presenting with intussusceptions, obstruction or bleeding as seen in our case & the tumor removed with minimal colonic resection[8]. The recurrence rate is high in inadequately resected tumors but prognosis is excellent with complete removal of the tumor[9].

CONCLUSION
Angiolipoma of the gastrointestinal tract is a rare benign tumor requiring a cor rect pre & post operative diagnosis to plan an appropriate, adequate surgery & hence offering the patient the best medical care & avoiding longer, complicated post operative course, altogether reducing medical costs.

REFERENCES

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