

## Case Report

**Report of A Rare Clinical Entity: Gastrointestinal Hemangiomas**Mehmet Fatih Ekici<sup>1</sup>, Tufan Egeli<sup>2</sup>, Uğur Deveci<sup>3</sup>, Zülfü Bayhan<sup>4</sup>, Sezgin Zeren<sup>4</sup><sup>1</sup>Department of General Surgery, Evliya Çelebi Training and Research Hospital, 43000 Kütahya, Turkey<sup>2</sup>Department of General Surgery, Faculty of Medicine, Dokuze Yül University, 35000, Izmir, Turkey<sup>3</sup>Department of General Surgery, Faculty of Medicine, Maltepe University, 34000, Istanbul, Turkey<sup>4</sup>Department of General Surgery, Faculty of Medicine, Dumlupınar University, 43100 Kütahya, Turkey**\*Corresponding author**

Mehmet Fatih Ekici

Email: [mfatih ekici@gmail.com](mailto:mfatih ekici@gmail.com)

**Abstract:** Appendectomy is one of the most common procedures in surgical emergency practice and also the most common cause of abdominal exploration. Hemangiomas of gastrointestinal tract are significantly rare. They are dangerous since they may cause massive or occult gastrointestinal bleeding. Patients may also present with abdominal pain, bowel obstruction, intussusception or perforation. Here we present a case who was incidentally diagnosed with multiple small bowel hemangiomas during abdominal exploration for acute appendicitis.

**Keywords:** Hemangioma, gastrointestinal surgery, accidentally

**INTRODUCTION**

Gastrointestinal hemangiomas are rare benign vascular lesions with reported incidence is %0.05. They can be detected in any part of the gastrointestinal tract [1]. These lesions usually be diagnosed incidentally during abdominal surgeries or endoscopic interventions. Even they are generally benign natured lesions, they can lead various clinical problems such as anemia, massive gastrointestinal bleeding or bowel obstruction [2]. Here we present a young female patient that was incidentally diagnosed with multiple gastrointestinal hemangiomas during surgery for acute appendicitis.

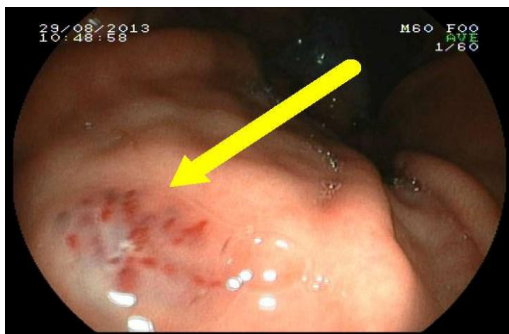
**CASE PRESENTATION**

31-year-old female patient, was admitted to emergency room with history of abdominal pain, nausea, and vomiting for 2 days. At the beginning, her pain was placed in epigastric area but then her pain shifted to right lower quadrant and localized there. Physical examination revealed tenderness in the right lower quadrant and rebounds were present. There was no pathological feature in plain radiography. Blood haemoglobine count was 7gr/dl, leukocyte and CRP count was normal and urine test did not show any abnormality. Abdominal ultrasonography revealed acute appendicitis. After transfusion of 2 units of red blood cells, the patient underwent emergency surgery. Mc Burney incision was made and the abdomen was entered. Appendix was seen hyperemic, edematous and erectil and this findings were consistent with acute appendicitis. Omental adhesions and pus were present around the cecum. Appendectomy was performed. During the operation, while we were examining the

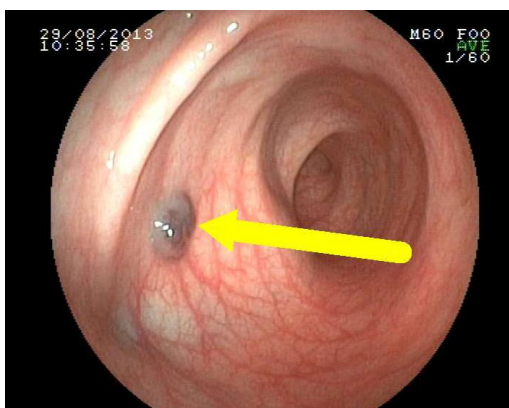
small intestine and the cecum, we noticed lots of mutiple hemangiomas which were placed at almost all part of the small bowel and colon. Hemongiomas were pink or red lesions and their diameters were between 0.5 cm to 2 cm (Figure 1). After the surgery, both upper and lower gastrointestinal endoscopy were performed and we detected 2 hemonagiomas on stomach corpus (Figure 2) and descending colon (Figure 3). There was no additional complaints after we started oral therapy for treatment of iron deficiency anemia and also referred her to haematology outpatient clinic for investigation regarding other anemia etiologies. The patients routin follow-up is continued.



**Fig 1: Multiple hemangiomas on small bowel segments**



**Fig 2 : Hemangioma on stomach corpus in endoscopic investigation**



**Fig 3: Hemangioma on descending colon during colonoscopy**

## DISCUSSION

Gastrointestinal hemangiomas are rarely found, mostly found at liver. Lower gastrointestinal hemorrhage means intraluminal blood loss from the distal Treitz ligament. Diverticulosis, anorectal disorders, benign or malignant neoplasia, inflammatory bowel disease and anjiodisplazi can cause bleeding [3]. Abrahamson and Shandling are divided into 3 main histopathological category; capillary, cavernous and mixed intestinal hemangiomas [4]. The most frequently observed is cavernous type. Hemangiomas originate from submucosal vascular structure that can grow into the muscularis layer. According to the settlement instead of hemangioma can give different clinical findings. Capillary hemangiomas, may apply with occult bleeding or profound anemia. The bleeding of the hemangiomas can be sudden and intense. Rubber bleb nevus syndrome, Klippel Trenaunay- Weber Syndrome, Maffucci syndrome, Proteus syndrome may be associated with such syndromes [3]. Hemangiomas is benign lesions that can be seen in many organs. Small intestine is the most common site of gastrointestinal hemangiomas [2]. In men than in women, 1.5 times more than in the small intestine gastrointestinal hemangiomas are seen [1, 2]. Large bowel is the second most common organ [3]. Hemangiomas in colon gives signs as rectal bleeding. Benign tumors of the esophagus generates 3.3% hemangiomas. Esophagus gives evidence at every level but mostly lower part [5]. Stomach hemangiomas are nearly 1.6 % of benign

tumors of stomach and nearly only 0.05% of all gastrointestinal (GI) neoplasms. Stomach hemangiomas may give evidence with anemia, epigastric pain, dyspepsia, occult bleeding are among the most frequent symptoms. Carcinomas must differential diagnosis [6].

Abdominal imaging, barium radiographs in mucosal irregularity can occur. The small intestine can be diagnosed with a mass or phelabolitis in tomography. Small lesions may remain occult. Pathologic findings was encountered in small lesions on imaging may. Angiography describes the arterial supply of hemangioma. Endoscopic ultrasound may help lesions underlying mucosa-submucosa [1, 6]. Endoscopic biopsy is limited usage for bleeding and can mis diagnosed on submucosal lesions [6].

Hemangiomas may cause intestinal obstruction or hemoperitoneum. Abdominal pain, vomiting, weight loss, bloating can be observed. Instant recognition, segmental resection is recommended in single lesions. For gastric and colon hemangiomas endoscopic submucosal resection can be helpful and succesful for selected patients [7]. Recurrences are rare. Low-dose radiation in patients with diffuse hemanjiomatosis, sclerotherapy, the arterial embolisation in nonresectable cases, applied with a decreased success rate [3].

In conclusion, gastrointestinal hemangiomas are a rare entity, they should be considered as a part of differential diagnosis in patients of any age and sex presenting with intestinal obstruction, occult bleeding. With a multidisciplinary approach, diagnosis and treatment will become easier for surgeons.

## REFERENCES

1. Levy DA, Abbot RM, Rohrman CA; Gastrointestinal Hemangiomas Imaging Findings with Pathologic Correlation in Pediatric and Adult Patients American Journal of Roentgenology. 2001; 177:1073-1081
2. Corsi A, Ingegnoli A, Abelli P; Imaging of small bowel cavernous hemangioma: report of a case with emphasis on the use of computed tomography and enteroclysis Acta Biomed, 2007; 78:139-43
3. Kazimi M, Ulas M, Ibis C; A rare cause of recurrent gastrointestinal bleeding: mesenteric hemangioma. World Journal of Emergency Surgery, 2009, 4,5
4. Abrahamson J, Shandling B; Intestinal hemangiomas in childhood and a syndrome for diagnosis: a collective review. J Pediatr Surg. 1973 Aug;8(4):487-95.
5. Rasalkar DD, Chiu PW, Teoh AY, Chu WC; Oesophageal haemangioma: imaging characteristics of this rare condition. Hong Kong Med J. 2010;16(3):230-1.

6. Basbug M, Yavuz R, Dablan M, Baysal B, Gencoglu M, Yagmur Y; Isolated cavernous hemangioma: a rare benign lesion of the stomach. J Clin Med Res. 2012;4(5):354-7.
7. Kawamoto K, Yamada Y, Furukawa N, Utsunomiya T, Haraguchi Y, Mizuguchi M, Oiwa T. et al.; Endoscopic submucosal tumorectomy for gastrointestinal submucosal tumors. Hepatogastroenterology. 1998;45:114–118.