



# A Case of Bleeding Duodenal Lipoma Treated Surgically

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## Abstract

Duodenal lipomas are rare benign tumours of the gastrointestinal system. They are mostly asymptomatic. A 76 years old woman is diagnosed duodenal lipoma in our hospital and operated due to bleeding. There is no complication after operation and the patient is discharged with good recovery. Duodenal lipomas are rare benign lesions and symptomatic of them can be treated endoscopically or surgically.

**Keywords:** Duodenum, lipoma, bleeding

## Introduction

Lipoma is a benign tumor of the fat tissue, and these tumors grow slowly. While they can develop in many regions of the gastrointestinal system (GIS), they are mostly encountered in the colon and small intestine. They are frequently solitary, but they can also be multiple in number. Of these lipomas, 90% are submucosal and the others are subserosal. They can be sessile or pedunculated and are mostly asymptomatic and incidentally detected (1). Symptomatic cases can be treated either endoscopically or surgically.

In this study, we aimed to evaluate a bleeding patient, who was surgically treated, with literature.

## Case Report

A 76-year-old female patient was admitted to the Clinic of Gastroenterology owing to the complaint of watery black defecation. It was learned that she had this complaint for 2 days; however, she consulted us when she experienced fatigue. Her physical examination revealed pale skin, and she was mildly tachypneic [respiratory rate: 20/min, arterial blood pressure (AP): 120/80 mmHg]; her abdomen was untroubled. Her rectal examination revealed melena with no additional pathology. In her hemogram, hemoglobin (Hgb) was 9.5 g/dL, hematocrit was 27%, white blood cell count was 9700  $\mu$ /L; her biochemical parameters were within normal intervals. The patient was given one unit of erythrocyte suspension. Upper GIS endoscopy of the patient revealed a lipomatous mass (4 $\times$ 4 cm) protruding to the lumen, and an ulcerated surface with clot was found at the junction of part two and three of the duodenum. Moreover, bright-colored, fresh blood was observed in the lumen. Because the root of the lesion was thick and deeply localized, it could not be endoscopically excised. Biopsy was not performed. No pathological appearance was observed in other regions.

The patient underwent contrast-enhanced, abdominal computed tomography, and the lesion defined in endoscopy was found to be lipomatous (6 $\times$ 4 $\times$ 4 cm) (Figure 1). The patient was followed in the clinic. Because of her on-going melena, decreased hemoglobin values (Hgb, 7 g/dL), development of hypotension (AP, 85/40 mmHg), and presence of a known duodenal lesion, she was consulted to the Department of General Surgery. Following consultation, an emergency surgery was planned.

The patient was operated on the second day of hospitalization. She underwent laparotomy, duodenotomy, and submucosal lesion excision (Figure 2, 3). The excised region was sutured with an absorbable material, and then duodenotomy was closed. No decrease in Hgb values, bleeding, and hypotension was observed in the postoperative period. On the fourth postoperative day, the nasogastric catheter was removed, and the regimen was started and increased gradually. The patient was discharged with full recovery on the tenth postoperative day. The pathological result of the patient was determined as lipoma. Written informed consent for the study was obtained from the patient.

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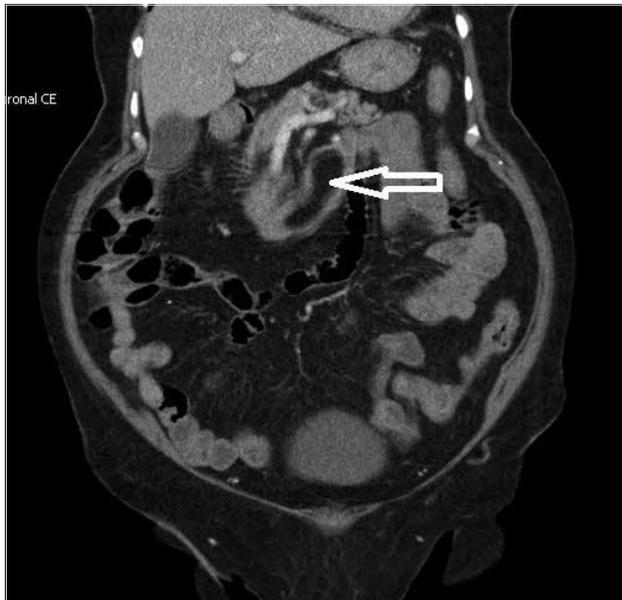
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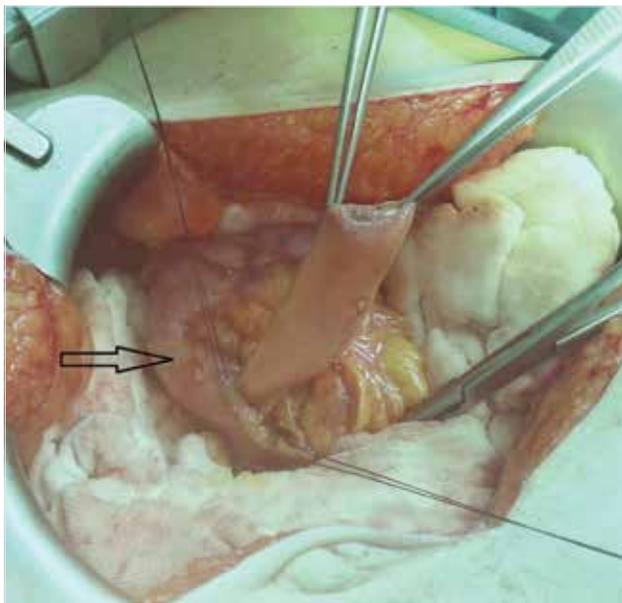
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**Figure 1.** Computed tomography image on coronal section; duodenal lipoma (marked by arrow)



**Figure 2.** Lipoma suspended after duodenotomy; duodenum (marked by arrow)



**Figure 3.** Excised duodenal lipoma with ulceration

## Discussion

Duodenal lipoma is a benign GIS tumor that is rarely encountered in the duodenum. Most lipomas in GIS are located in the colon followed by the small intestine, duodenum, stomach, and esophagus. Of all GIS lipomas, 4% are located in the duodenum. They peak in the fifth and seventh decades of life and are mostly asymptomatic (2).

With endoscopy, the diagnosis of GIS lipomas has been easier. Moreover, it is possible to excise these lesions using endoscopy. Particularly, pedunculated polypoid lipomas are very suitable for this procedure (3). Recently, it has been reported that endoscopic resection can be successfully performed even in lipomas of the size  $\geq 4$  cm (4). However, a surgical treatment is required for symptomatic lesions that cannot be endoscopically removed or for lesions with the suspicion of malignancy. Biopsy is not necessary in every case that is considered to be lipoma but not suspected to be malignant. Endoscopic examination provides two clues indicating that lesion is a lipoma. There are some findings that support the diagnosis of lipoma. One is the “cushion sign” (when forceps or endoscope is pressed on the lesion during the procedure, the lesion appears soft and indented) and the other is the “tenting sign” (when the lesion is pulled away with forceps, it appears like a tent) (5).

Duodenal lipomas can present with bleeding, intussusception, or obstruction. Tomography, MR, and endoscopy are very helpful in diagnosis. With the help of these techniques, establishing accurate diagnosis and planning appropriate treatment are facilitated. Because lipomas are benign and there is no reported conversion to malignancy, endoscopic resection of these lesions becomes easier under suitable conditions (3). However, this can be impossible in some situations; surgical treatment is required in such cases. While open surgery can be performed in these cases, laparoscopic interventions can also be preferred (6).

## Conclusion

Duodenal lipomas are benign lesions and mostly asymptomatic. Symptomatic duodenal lipomas can be treated endoscopically or surgically. In our case, the patient was treated using open surgery because she had bleeding duodenal lipoma; she was discharged following a full recovery. In such cases, as in our study, treatment is possible and endoscopic treatment choices should also be kept in mind for appropriate patients.

**Informed Consent:** Written informed consent was obtained from patient who participated in this case.

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## References

1. Fernandez MJ, Davis RP, Nora PF. Gastrointestinal lipomas. Arch Surg 1983; 118: 1081-3. [\[CrossRef\]](#)
2. Mayo CW, Pagtalunan RJG, Brown DJ. Lipoma of the alimentary tract. Surgery 1963; 53: 598-603.
3. Blanchet MC, Arnal E, Paparel P, Grima F, Voiglio EJ, Caillot JL. Obstructive duodenal lipoma successfully treated by endoscopic polypectomy. Gastrointest Endosc 2003; 58: 938-9. [\[CrossRef\]](#)
4. Huang WH, Peng CY, Yu CJ, Chou JW, Feng CL. Endoloop-assisted unroofing for the treatment of symptomatic duodenal lipomas. Gastrointest Endosc 2008; 68: 1234-6. [\[CrossRef\]](#)
5. Maderal F, Hunter F, Fuselier G, Gonzales-Rogue P, Torres O. Gastric lipomas-an update of clinical presentation, diagnosis, and treatment. Am J Gastroenterol 1984; 79: 964-7.
6. Parmar AK, Bibyan M, Khandelwal R, Reddy PK. Laparoscopic management of a large duodenal lipoma presented as gastric outlet obstruction. JSLS 2013; 17: 459-62. [\[CrossRef\]](#)

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