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# LIPOSARCOMA OF THE CECUM

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## ABSTRACT

Liposarcoma of the digestive tract is very rare; only a few cases of liposarcoma of the stomach have been reported so far.

In this article a 29-year-old woman is presented with a history of long-standing mid-abdominal pain and various treatments for anemia and peptic ulcer disease which did not improve her symptoms; until a barium-enema revealed a filling defect in the cecum. Under laparotomy a lobulated lipoma-like tumor with yellowish color was seen which measured 3×4cm. A right hemicolectomy was performed. The pathology reported a liposarcoma of the cecum with no mesenteric lymph node involvement. The patient is free of disease 1.5 years after surgery.

As far as we know, this is the first reported case of liposarcoma of the large bowel in the world.

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## INTRODUCTION

Liposarcoma, a malignant soft tissue tumor, was reported by Kingblom in 1975, Hashimoto in 1982 and Azumi in 1987 who gave a detailed description on this subject.

It is more frequent in the 5th and 6th decades of life and has a slight male predominance.[1,2,3] This is a common tumor in adults, and very rare in children.

Liposarcoma is classified into four pathologic subgroups of prognostic significance; well-differentiated, myxoid, round cell and pleomorphic.[3,4]

Histologicallty, it includes multiple vacuolated lipoblasts with two or more droplets of lipid in different sizes which could produce indentation in its large chromatic and pleomorphic nucleus.

Sometimes in single vacuolated signet-ring type liposarcomas the diagnosis could be difficult. The most common sites of involvement are the lower extremity and retroperitoneum. The patient usually complains of a nontender mass with various growing speed. The diameter of the tumor is usually 10-15cm.

Half of these lesions recur after resection. About 25% of these tumors metastasize and have a 60% 5-year survival.[3,4]

## CASE REPORT

A 29-year old woman was admitted for mid-abdominal pain, dizziness and short periods of blackout spells. She had had these symptoms for about four years before admission. She had undergone upper GI endoscopy a few times and had been given $H_2$-blockers and proton-pump-inhibitors along with ferrous-sulfate under the diagnosis of peptic ulcer disease and anemia. The treatment was not effective and her symptoms intensified a week before admission.

On admission her temperature was 36.8°C, respiration 14/min, pulse rate 70/min and blood pressure 95/65 mmHg.

In her physical examination the abdomen was soft, no pain or tenderness was present and no mass could be palpated.

She had no positive physical signs except for her pale conjunctiva. The laboratory examination done on admission showed FBS to be 86 mg/dL, Hg7.7 mg/dL, WBC 7700/$mm^3$ with normal differentiation, albumin 4.5 mg/dL, liver enzymes, urea and creatinine were normal, and her serum amylase, alkaline phosphatase and LDH were also normal.

Barium enema showed a filling defect in the cecum (Fig. 1) and the patient was referred for surgery with the diagnosis of tumor of the cecum.

Laparotomy revealed an intraluminal tumor of the cecum with soft consistency and 3×4 cm in diameter; there were two small lymph nodes present in the adjacent mesentery. The other abdominal organs including the liver were normal on inspection and palpation.

A right hemicolectomy was performed which included the mesentery and enlarged lymph nodes.

The lumen of the cecum was opened for examination of the tumor, which showed a yellow lipoma-like tumor with lobulation 3×4 cm in diameter.

There was no gross ulceration on the surface of the tumor and no bleeding in the lumen. The color, shape and consistency of the tumor was unusual in the bowel (Fig. 2).

Pathology reported liposarcoma of the cecum (Figs. 3-5), and the lymph nodes in the mesocolon and mesoileum were reportedly normal.

## DISCUSSION

Liposarcoma is not an uncommon soft tissue tumor; the tumor has a yellowish color and looks like a lipoma but with a larger diameter. The most common sites of involvement are the lower extremity and retroperitoneum.[3,4]

In the lower extremity it involves the medial part of

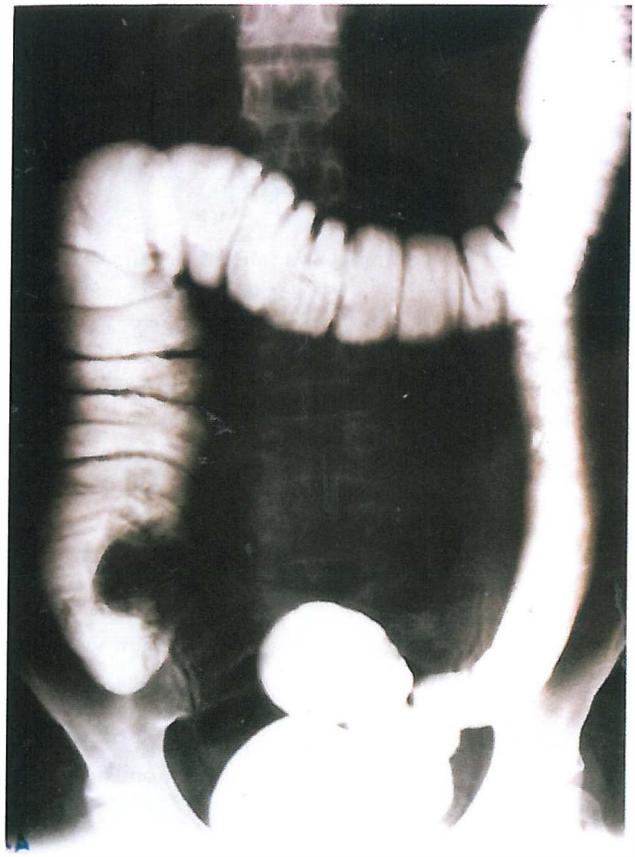

**Fig. 1.** Radiograph of the large bowel.

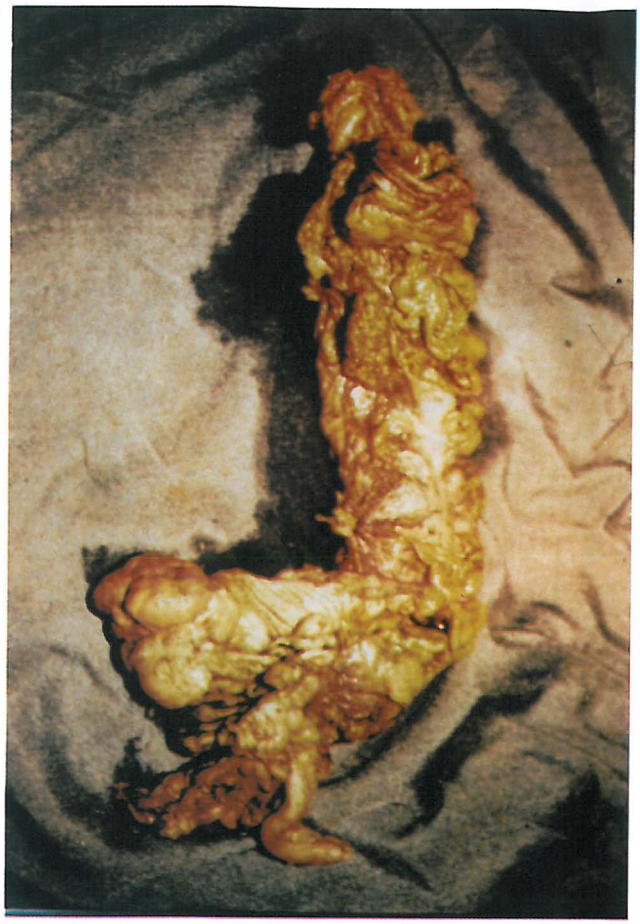

**Fig. 2.** Photograph of cecal tumor, right hemi-colectomy specimen.

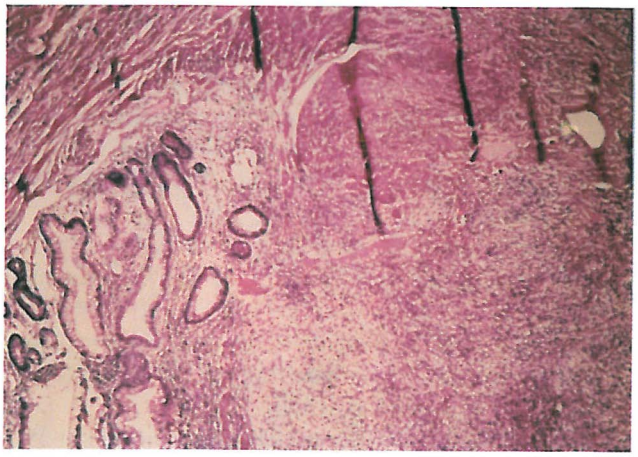

**Fig. 3.** Liposarcoma with vascular invasion. H & E staining (magnification ×200).

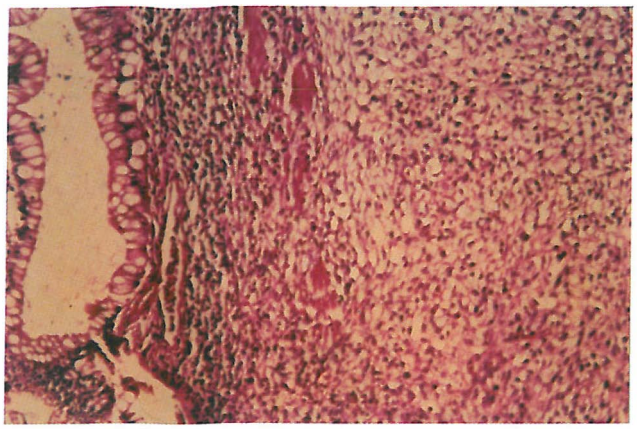

**Fig. 4.** Liposarcoma of the large bowel. H & E staining (magnification ×200).

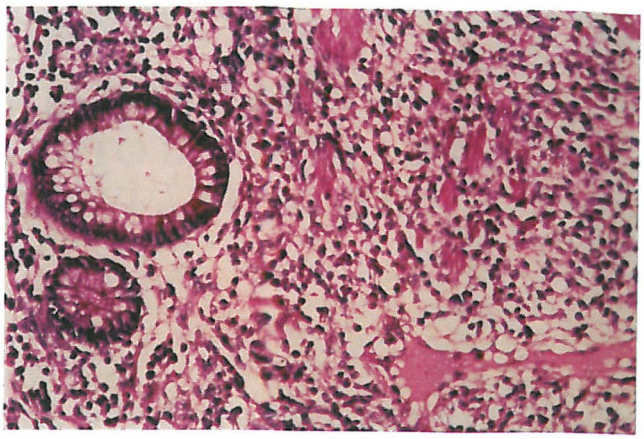

**Fig. 5.** Liposarcoma with invasion of the bowel wall. H & E staining (magnification ×200).

the thigh and popliteal space, and in the inguinal region it involves the spermatic cord. This tumor is derived from the primary mesenchymal cells and unlike lipoma it is found in places with minimal fatty tissue.

The prognosis depends on the site and subtype of the tumor. The patient with retroperitoneal liposarcoma has a 35% 5-year survival regardless of their subtypes.[3,4]

Sometimes the tumor grows in the vicinity of vital structures and surgical extirpation is not feasible, so these is a higher chance of recurrence.

If the lower extremity tumors are of well-differentiated or myxoid subtypes, they have a more favorable prognosis and metastasize rarely, but the round cell or pleomorphic varieties are more aggressive and have a 20% 5-year survival.

Liposarcoma is very rare in the digestive tract and only a few cases of this tumor have been reported in the stomach.[5,6]

Also, this tumor is very rare in the mesentery of the small bowel and mesocolon and only nine similar cases have been reported[1] so far. The intraluminal liposarcoma of the colon and small bowel has not been reported as far as the author believes, and this appears to be the first case reported.

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