A Cystic Lymphangioma of the Colon Seen in a Patient with Early Gastric Cancer

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ABSTRACT. Lymphangiomas are very rare benign neoplasms of the gastrointestinal tract. A case of cystic lymphangioma in the hepatic flexure of the colon seen in patient with early gastric cancer is reported and the literature is reviewed.

Key words: Lymphangioma — Cystic — Colon

Although lymphangiomas develop in every part of the body, they are mostly seen in the axillary, inguinal and scapular regions. They are very rarely seen in the digestive tract. This report deals with a case of cystic lymphangioma in the right flexure of the colon, seen in patient with early gastric cancer and reviews the literature on this neoplasm.

CASE REPORT

The patient, a 62-year-old male with epigastric discomfort, was admitted to our hospital on November 26, 1984. An upper gastrointestinal series with barium meal revealed early gastric cancer type IIc on the posterior wall of the antrum. A preoperative routine barium enema study revealed a round filling defect of walnut size in the hepatic flexure of the colon. Double contrast roentgenography disclosed a semispheric elevated lesion with a relatively sharp margin based on the medial wall of the right flexure (Fig. 1). It was slightly lobulated and changed in shape as it changed position.

The patient was operated upon on December 4, 1984, under a diagnosis of early gastric cancer and submucosal tumor of the colon. After a radical subtotal gastrectomy for the stomach cancer, a colonotomy was made close to the tumor. The tumor protruded into the lumen of the colon in a semispheric form and extirpated without colonic resection. The tumor measured $3.1 \times 2.9 \times 2.1$ cm, and was a soft and spongy mass covered with normal looking mucosa.

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On sectioning, it was found to be a multilocular cyst containing 10 ml of colorless mucous fluid. A histological examination, showed the cyst to be situated in the submucosa, with normal overlying colonic mucosa (Fig. 2). The cystic spaces were lined with flat endothelial cells and separated by thin fibrovascular septa containing interspersed bundles of smooth muscle cells (Fig. 3). The appearance was clearly that of a cystic lymphangioma.

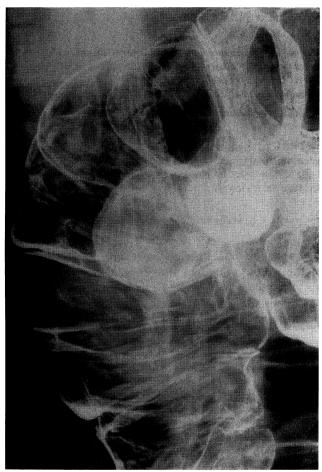


Fig. 1. This double contrast roentgenogram shows a sharply defined, radiolucent, hemispheric mass in the hepatic flexure.

DISCUSSION

Cystic lymphangiomas are benign tumors which rarely develop in the digestive tract. Fleming and Carlson¹⁾ found nine such lesions among 453,708 roentgenographic examinations of 1,437,767 patients of the Mayo Clinic. However, in a review of a large pathological series, Ehrlich and Hunter²⁾ could not identify any lymphangiomas among 263 benign tumors of the gastrointestinal tract. A lymphangioma of the colon was reported first in 1932, by Chisholm

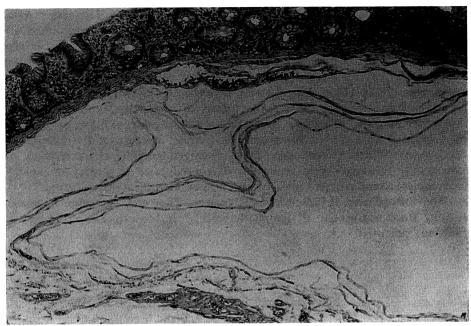


Fig. 2. Normal mucosa and musculosis mucosae overlying the multilocular cystic lesion (Hematoxylin and Eosin $\times 40$)

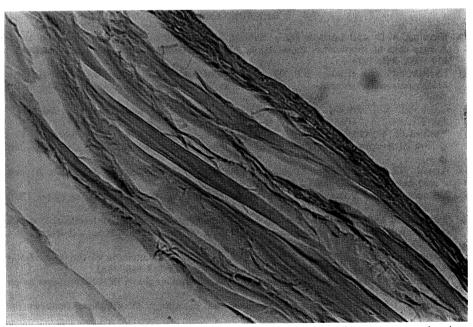


Fig. 3. High power view of fibrovascular septa between lymphangiomatous cysts, showing smooth-muscle bundles (Hematoxylin and Eosin $\times 400$)

and Hillkowitz³⁾ in English, and in 1965 by Yoshitoshi⁴⁾ in Japanese. About 20 cases of lymphangioma of the colon have appeared in Japanese literature.

Cystic lymphangioma usually presented in the fourth to six decades in man, with symptoms of abdominal pain, altered bowel habits, and rectal bleeding. Radiographic features were described by Arnett and Friedman.⁵⁾ Cystic lymphangiomas of the colon are relatively wide based, sharply marginated, hemispherical masses, protruding into the lumen of the colon, and are overlaid with intact mucosa. They are best visualized during partial filling of the colon and disappear with colonic distentions by barium, because of its radiolucency and compressibility. Although these roentgenographic characteristics are known, only two cases were accurately diagnosed prior to surgery in Japan.^{6,7)} Endoscopical examinations may permit clearer identification in future.⁸⁾

The histogenesis of these lesions is unclear. They may be benign neoplasms resulting from overgrowth of lymphatic vessels⁹⁾ or hamartomas, ¹⁰⁾ and have no malignant potential.

SUMMARY

A case of cystic lymphangioma of the hepatic flexure of the colon seen in patient with early gastric cancer is reported and the literature on this neoplasm is discussed. Although this neoplasm has some roentgenographic characteristics, only two cases have been accurately diagnosed before operation in Japan.

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