# Lymphangioma of the Small Intestine —A Case Report—

Masatoshi KIMOTO, Hideki NAGANO, Sueharu IWAMOTO, Tsutomu MURE, Hirohide SHIMIZU, Yasuo SEO, Yasuhisa YAMAMOTO, Hiroshi NOBUTO, Kaiso SANO, Kazunori HOSHIKA,\* Tsuyoshi KIHARA,\* Takuya MORIYA,\*\* Mitsuyoshi HIROKAWA\*\* and Sadaaki NAKAGAWA\*\*

Division of Gastroenterological Surgery, Department of Surgery, \*Division of Gastroenterology, Department of Medicine, \*\*Department of Pathology,

Kawasaki Medical School, Kurashiki 701-01, Japan

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ABSTRACT. Lymphangiomas of the small intestine are rare tumors arising from masses of dilated lymphatic vessels in the submucosa. There are 11 cases of lymphangioma of the small intestine in the Japanese literature. We report a case of lymphangioma of the jejunum seen in a 76-year-old female and discuss with clinical feature.

Key words: lymphangioma - jejunum

Tumors of the small intestine are relatively rarer, accounting for about 3% of total neoplasms of the alimentary tract. Lymphangiomas of the small intestine are especially rare tumors arising from masses of dilated lymphatic vessels in the submucosa.

We report a case of lymphangioma of the jejunum and discuss our findings with reference to the literature.

### CASE REPORT

A 76-year-old female with a ten-month history of abnormal in bowel movements and weight loss visited our hospital on November 22, 1985, and was admitted to the ward of internal medicine on November 29, 1985. She had suffered repeated alternative diarrhea and constipation from the beginning of the year. This seemed to have been influenced by a previous hysterectomy for the uterine myoma at 36 years of age.

On physical examination no abnormal findings except the previous operation scar in the lower abdomen were noted and every parameter of blood chemistry was within normal limits. An upper gastrointestinal series revealed a protruding intracanalicular lesion in the jejunum, located about one meter from the ligament of Treitz. The tumor appeared hemispherical in shape with a smooth contour, measuring  $14\times10$  mm. A double contrast study and selective small intestinography showed a bridging fold on the tumor, and it was diagnosed as a submucosal tumor of the jejunum (Fig. 1).

Laparotomy was performed on January 9, 1986. Widespread adhesion was

木元正利,長野秀樹,岩本末治,牟礼 勉,清水裕英,瀬尾泰雄,山本康久,延藤 浩,佐野開三星加和徳,木原 彊,森谷卓也,広川満良,中川定明

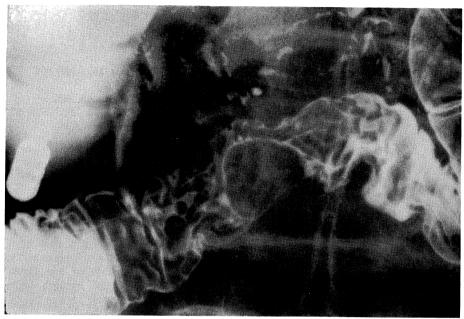


Fig. 1. A selective small intestinography shows hemispherical tumor in the jejunum.

seen in the peritoneal cavity, especially in the lower abdomen. A small finger-tipsized soft spongy tumor was seen in the jejunum, 95 cm distant from the ligament of Treitz. Ten centimeters of the jejunum including the tumor was resected and reconstructed by end-to-end anastomosis.

The patient was discharged on the 30th postoperative day in good condition.

## HISTOLOGIC FINDINGS

Two hemispherical spongy yellowish tumors were found in the resected jejunum (Fig. 2). The larger tumor measured  $11 \times 9 \times 8$  mm and the smaller one  $3 \times 3 \times 3$  mm.

Histologic sections showed that the two tumors were composed of an aggregate of numerous lymphatic vessels, which were situated in the submucosa with normal overlying intestinal mucosa. The lymphatic spaces showed various sizes and were filled with proteinaceous fluid containing a small number of lymphocytes. The endothelium was flattened and showed no cytological atypism. The stroma was loose and collagenous, and associated with slight lymphocytic infiltrates. These findings led to a clear diagnosis of lymphangioma of the cavernous type.

# DISCUSSION

The small intestine has only a small number of diseases considering its length. Tumors of the small intestine are rarely seen in comparison with those of other parts of the digestive tract, accounting for about 3% of all tumors of the alimental tract.<sup>1)</sup> Leiomyoma is the most common benign neoplasm in

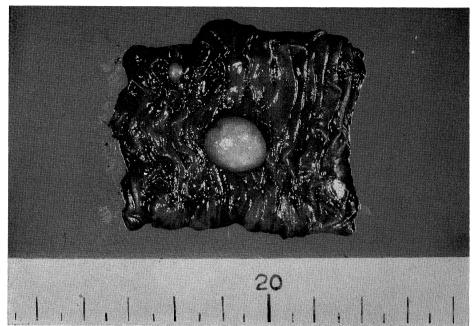


Fig. 2. Two tumors are seen in the resected intestine, the larger tumor measured  $11 \times 9 \times 8$  mm and smaller one  $3 \times 3 \times 3$  mm.

the small intestine. Allen<sup>2)</sup> reported that leiomyomas accounted for about one third of all benign tumors of the small intestine. Adenomatous polyps, lipomas, fibromas and hemangiomas are commonly seen in the small intestine, and lymphangioma is one of the rarest tumors.

Fleming and Carlson<sup>3)</sup> found nine such lesions among 453,708 roentgenographic examinations of 1,437,767 patients in Mayo Clinic. However, in a review of a large pathological series, Ehrlich and Hunter<sup>4)</sup> were unable to identify any lymphangiomas among 263 benign tumors of the gastrointestinal tract.

We collected 11 cases of lymphangioma of the small intestine mentioned in the Japanese literature. Seven were in the duodenum<sup>5)</sup> and four in the ileum.<sup>6)</sup> No lymphangioma of the jejunum has not been reported until now in Japan. The average age of patients was 44.6 years and the youngest was 17-year-old male,<sup>7)</sup> the oldest is our preserve 76-year-old female patient. There were 6 male and 6 female patients.

Most intestinal lymphangiomas are asymptomatic, but they can produce a symptoms of intussusception seen usually in cases of the other polypoid lesions. Most of the cases were found incidentally upon examination for other diseases. The treatment for this tumor is completed undoubtedly surgical removal.

## SUMMARY

We reported a case of lymphangioma of the jejunum seen in a 76-year-old woman and reviewed the related Japanese literature.

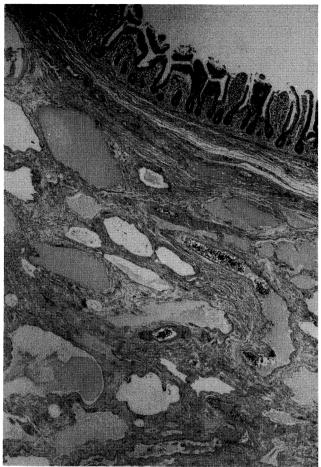


Fig. 3. Histologic section shows the tumors are composed of an aggregate of numerous lymphatic vessels.

### REFERENCES

- Ewing, J.: Neoplastic Diseases, Fourth edition. W.B. Saunders Company, Philadelphia, 1940
- Allen, C.G.: Tumors of the small intestine. Caldwell Lecture, 1962. AJR 89: 685-705, 1963
- 3) Fleming, M.D. and Carlson, H.C.: Submucosal lymphatic cysts of gastrointestinal tract; A rare case of submucosal mass lesion. AJR 110: 842-845, 1970
- 4) Ehrlich, J.C. and Hunter, O.B., Jr.: Tumors of the gastrointestinal tract; a survey of 813 in persons of military age during World War II. Surg. Gynecol. Obstet. 85: 98-106, 1947
- 5) Fukunaga, A., Ichioka, I., Kitayama, I. and Itaya, I.: An experience of lymphangioma of the duodenum. Surg. Clin. (Jpn) 48: 609-611, 1953
- 6) Nishimoto, K., Sakaki, Y., Kawaguchi, M., Mutou, H. and Kiuchi, K.: An adult case of the intussusception by lymphangioma of the ileum. Hiroshima Igaku (Jpn) 34: 795-797, 1981
- 7) Tamura, T., Kojyou, H., Miyoshi, Y., Fukumoto, S. and Hirayama, C.: Three cases of lymphangioma of the small intestine. Gastroenterol. Endosc. (Jpn) 21: 1979-1980, 1979