

Gastrointestinal metastasis of cardiac leiomyosarcoma

A 78-year-old woman was admitted to our hospital with a 1-month history of fever. Two years earlier, she had undergone surgery for cardiac leiomyosarcoma in the left atrium. Pathological examination had shown complete resection of the tumor.

Contrast-enhanced computed tomography showed an enhanced structure in the jejunum (● Fig. 1). Transoral single-balloon enteroscopy performed for closer examination detected a smooth-surfaced tumor (● Fig. 2). Similar tumors were

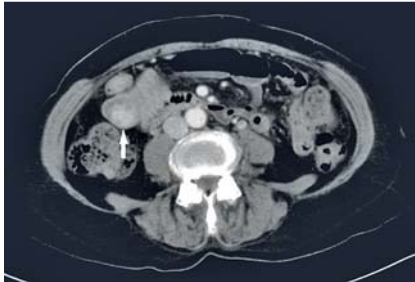


Fig. 1 Contrast-enhanced computed tomography showed an enhanced lesion in the jejunum (arrow).

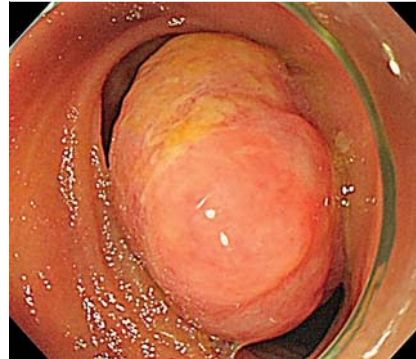


Fig. 2 Endoscopic view showing the jejunal tumor.

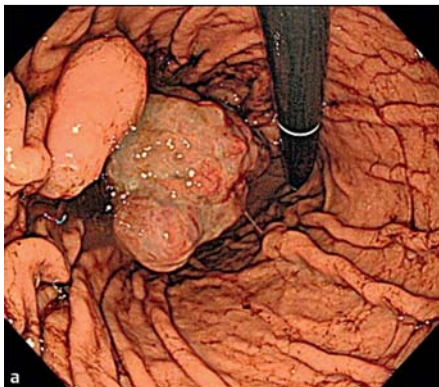


Fig. 3 Endoscopic view showing the gastric tumors.

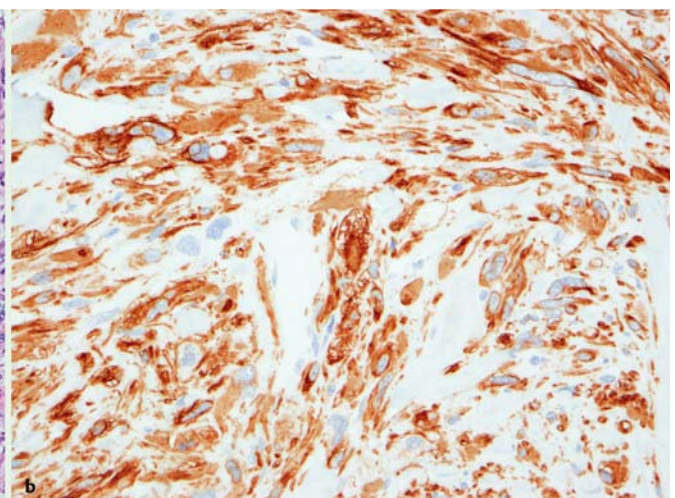
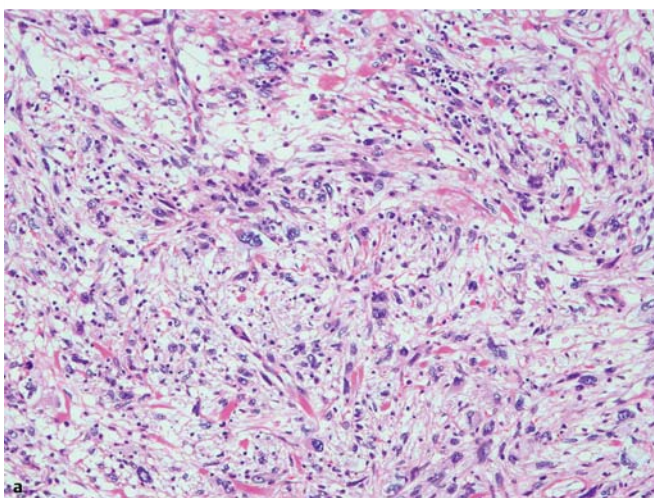
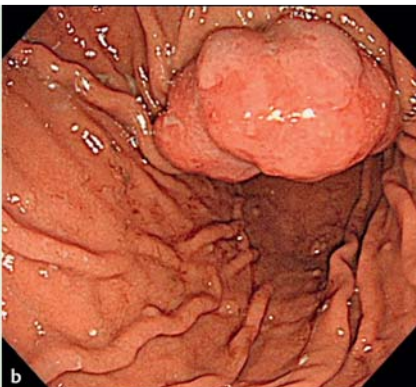


Fig. 4 Pathological findings of the jejunal tumor. **a** Hematoxylin and eosin staining. **b** Desmin staining.

identified in the stomach (● Fig. 3). Elective surgery was scheduled, but intussusception developed, caused by the jejunal tumor, and an emergency operation was performed.

The pathological findings showed spindle-shaped cells with high rates of nuclear pleomorphism and mitosis (● Fig. 4a). Immunohistochemical studies showed positive results for desmin, α -smooth muscle actin, HHHF-35, caldesmon, and calponin, but negative results for myoglobin, myogenin, and MyoD1 (● Fig. 4b). The pathological result closely resembled that of the cardiac tumor resected 2 years earlier.

From the above, we concluded that the tumors represented gastrointestinal (GI) metastases of cardiac leiomyosarcoma. The patient declined chemotherapy and was discharged; she remains under follow-up in the outpatient department.

Primary cardiac tumors are very rare, with a reported incidence of about 0.02% per person-year [1]. The frequency of primary leiomyosarcoma of the heart is less than 0.25% of all cardiac tumors [2]. The prognosis for patients with malignant heart tumors remains poor because treatment approaches have yet to be established. Some reports have described longer survival with complete resection than with incomplete resection [3]. The effectiveness of chemotherapy and/or radiation therapy is controversial [3]. Fewer reports have been made regarding cardiac leiomyosarcoma. Glaoui et al. encountered a long-term survivor, but most patients die within a year [4]. A single-center review revealed no cases of GI metastasis from primary cardiac malignancy [5]. To the best of our knowledge, the case described here represents the first report of GI metastasis of cardiac leiomyosarcoma.

Endoscopy_UCTN_Code_CCL_1AC_2AC

Competing interests: None

Koichiro Abe¹, Kazunori Seo¹, Minami Yagi¹, Yuko Sasajima², Takahiro Yagi³, Tsuyoshi Inaba³, Ryoji Fukushima³

¹ Department of Internal Medicine, Teikyo University School of Medicine, Tokyo, Japan

² Department of Pathology, Teikyo University School of Medicine, Tokyo, Japan

³ Department of Surgery, Teikyo University School of Medicine, Tokyo, Japan

References

- 1 Reynen K. Frequency of primary tumors of the heart. *Am J Cardiol* 1996; 77: 107
- 2 Burke AP, Cowan D, Virmani R. Primary sarcomas of the heart. *Cancer* 1992; 69: 387–395
- 3 Putnam JB Jr, Sweeney MS, Colon R et al. Primary cardiac sarcomas. *Ann Thorac Surg* 1991; 51: 906–910
- 4 Glaoui M, Benbrahim Z, Belbaraka R et al. An uncommon long-term survival case of primary cardiac leiomyosarcoma. *World J Surg Oncol* 2014; 12: 338
- 5 Simpson L, Kumar SK, Okuno SH et al. Malignant primary cardiac tumors: review of a single institution experience. *Cancer* 2008; 112: 2440–2446

Bibliography

DOI <http://dx.doi.org/10.1055/s-0042-118178>
Endoscopy 2016; 48: E349–E350
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Koichiro Abe, MD, PhD
Department of Internal Medicine
Teikyo University School of Medicine
2-11-1 Kaga
Itabashi-ku
Tokyo 173-8606
Japan
Fax: +81-3-53751308
abe@med.teikyo-u.ac.jp