

Small-intestinal cancer arising from heterotopic pancreas



Fig. 1 Small-bowel radiography shows a protrusion with smooth margin accompanied by stenosis in the jejunum. There were barium flecks and fold convergences in the anal side of the stenosis.



Fig. 2 Oral double balloon endoscopy shows a submucosal tumor in the jejunum.

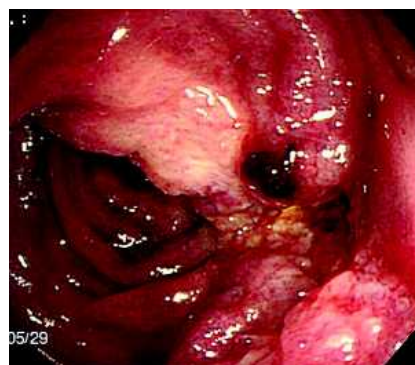


Fig. 3 Intraoperative enteroscopy from the anal side of the stenosis reveals a nodular and friable tumor with an ulcer in the center.

We report on a case of jejunal cancer arising from heterotopic pancreas, as depicted by small-bowel radiography and double balloon endoscopy.

A 64-year-old woman was admitted to our hospital with abdominal distension and epigastric pain. Small-bowel radiography with double contrast study showed a stenosis in the jejunum and a dilatation of the proximal small intestine (● **Fig. 1**). Oral double balloon endoscopy showed a smooth, ulcerating tumor that involved the jejunum circumferentially (● **Fig. 2**). Under laparotomy, a solid mass was seen with a stenosis about 45 cm distal to the ligament of Treitz. Intraoperative enteroscopy from the anal side of the stenosis revealed a nodular and friable tumor with an ulcer (● **Fig. 3**). The segment of the jejunum containing the tumor together with some enlarged lymph nodes were removed.

Macroscopically, there was a mass with an umbilication and an irregular ulcer, which was covered with normal mucosa (● **Fig. 4**). Histologically, there was pancreatic tissue within the submucosa and the muscularis propria in the proximal part of the tumor, and adenocarcinoma cells were seen peripherally in the pancreatic tissue (● **Fig. 5 and 6**). These findings were compatible with the diagnosis of adenocarcinoma originating from heterotopic pancreas. Although we treated

the patient by chemotherapy with gemcitabine, she died as a result of carcinomatous peritonitis 5 months after the surgery.

Although extremely rare, there have been cases in which small-intestinal heterotopic pancreas was presumed to have transformed into adenocarcinoma [1–3]. The images from our case can be summarized



Fig. 4 A macroscopic view of the resected specimen shows that the tumor with an umbilication is covered by normal mucosa.

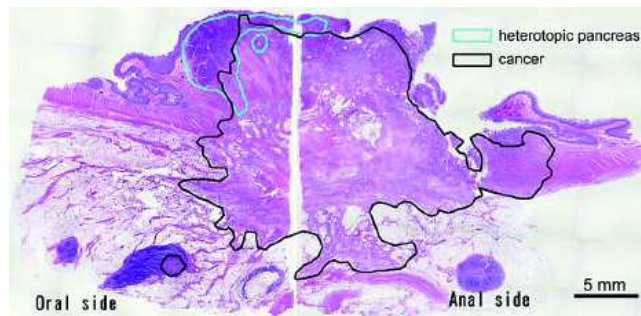


Fig. 5 Histologic examination of the specimen shows that the tumor is composed of areas of heterotopic pancreas (surrounded by blue line) and adenocarcinoma (surrounded by black line).

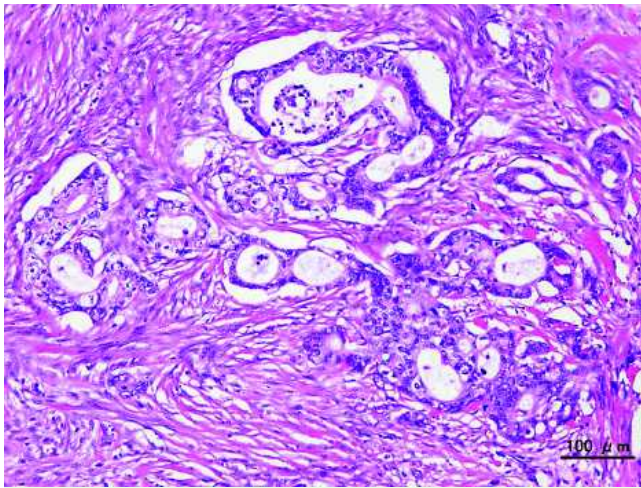


Fig. 6 A high-power view of the carcinomatous area indicates that the cancer cells are arranged in tubular and cribriform patterns with abundant fibrous stroma.

as asymmetrical luminal narrowing with a smooth tumor in the oral side and an ulcerating nodular tumor in the anal side. Our case suggests that enteroscopists should regard heterotopic pancreas as a possible premalignant lesion.

Endoscopy_UCTN_Code_CCL_1AC_2AC

K. Fujita¹, K. Hirakawa¹, T. Matsumoto², K. Amano¹, S. Yanai¹, S. Fujioka¹, Y. Himeno¹, K. Motoyama³, Y. Nakashima⁴, M. Iida²

¹ Division of Gastroenterology, Fukuoka Red Cross Hospital, Fukuoka, Japan

² Department of Medicine and Clinical Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

³ Division of Surgery, Fukuoka Red Cross Hospital, Fukuoka, Japan

⁴ Division of Pathology, Fukuoka Red Cross Hospital, Fukuoka, Japan

References

- 1 *Persson GE, Boiesen PT.* Cancer of aberrant pancreas in jejunum. Case report. *Acta Chir Scand* 1988; 154: 599–601
- 2 *Makhlouf HR, Almeida JL, Sobin LH.* Carcinoma in jejunal pancreatic heterotopia. *Arch Pathol Lab Med* 1999; 123: 707–711
- 3 *Arao J, Fukui H, Hirayama D et al.* A case of aberrant pancreatic cancer in the jejunum. *Hepatogastroenterology* 1999; 46: 504–507

Bibliography

DOI 10.1055/s-2008-1077693

Endoscopy 2008; 40: E240–E241

© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

K. Fujita, MD

Department of Anatomic Pathology
Graduate School of Medical Sciences
Kyushu University
Maidashi 3-1-1

Higashi-ku
Fukuoka 812-8582

Japan

Fax: +81-92-6425968

kfujita@surgpath.med.kyushu-u.ac.jp