

Double-balloon enteroscopy for the detection of midgut carcinoids

Dear Sir,

We read the report of Yamaguchi et al¹ with great interest and would like to stress the usefulness of double-balloon enteroscopy in the detection of midgut carcinoids that escaped conventional imaging.

Midgut carcinoids are rare and notorious for primary tumors that are difficult to localize. Conventional imaging techniques often fail to pinpoint small primary neuroendocrine tumors of the small intestine.^{2,3} We have reported that (18)F-dopa positron emission tomography was superior to conventional techniques for visualizing both primary tumors and locoregional lymph-node metastases of serotonin-expressing midgut carcinoids.⁴

In the last 12 months, we have used double-balloon enteroscopy⁵ to investigate a series of five consecutive patients suffering from metastatic midgut carcinoids. We detected small neuroendocrine tumors of the ileum (0.8, 1.0, 1.2, and 1.3 cm in diameter; Fig. 1) in four of the five men (mean age 66 years, age range 59 to 75). Histopathological evaluation of biopsy specimens revealed well-differentiated neuroendocrine carcinomas (Ki67 expression <5%). Double-balloon enteroscopy failed to localize the primary tumor in only one of the five patients. Conventional radiologic imaging did not visualize any of the primary tumors. Thus, double-balloon enteroscopy is an effective new technique for localizing and verifying neuroendocrine tumors of the jejunum and ileum. Careful selection of patients is required.



Figure 1. The shown ileal neuroendocrine cancer was detected by double-balloon enteroscopy (at 50 cm proximal of the ileocecal valve).

**Hans Scherübl
Siegbert Faiss
Rebecca Tschöpe
Martin Zeitz**

*Charité – Universitätsmedizin Berlin
Campus Benjamin Franklin
Berlin, Germany*

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Response:

We appreciate the letter by Scherubl and colleagues in response to our recently published report “Multiple carcinoid tumors of the ileum preoperatively diagnosed by enteroscopy with the double-balloon technique.”¹ It is admirable that they have performed double-balloon enteroscopy, during a 12-month period, in as many as 5 patients who suffered from metastatic mid gut carcinoid. We agree with Scherubl and colleagues that double-balloon enteroscopy is an effective new technique for localizing and verifying midgut carcinoids.

There have been many recent reports about the usefulness of double-balloon enteroscopy.¹ Double-balloon enteroscopy can be used to diagnose small lesions of the small bowel that are undetectable by conventional imaging modalities. Such lesions include not only carcinoid but also angiodysplasia, small ulceration, erosion, and mucosa-associated lymphoid tissue.¹⁻⁴ We believe that double-balloon enteroscopy will become a standard procedure for diagnosing small-bowel diseases that are undetectable by conventional radiologic imaging.

**Toshiki Yamaguchi, MD
Noriaki Manabe, MD, PhD
Shinji Tanaka, MD, PhD
Akira Fukumoto, MD
Masaru Shimamoto, MD**