A Case of Early Gastric Cancer Whose Diagnosis Was Expedited by Amogastrin-\(^{99m}\text{Tc}\) Pertechnetate Scintigraphy

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\(^{99m}\text{Tc}\) pertechnetate imaging of the stomach was carried out in a case of 63-year-old man 15 min after amogastrin. A coldness on the scintigram led to an exploratory laparotomy, and a carcinoma in situ was found and operated.

This paper is to report clinical usefulness of amogastrin,\(^{99m}\text{Tc}\) pertechnetate scintigraphy of the stomach (AMG-S) (Okuyama et al. 1982). A 63-year-old man who had been radically dissected for a right breast cancer and been irradiated for 5 years before noticed recently weight loss. There were no other signs or symptoms of recurrence. The examining physician (H.M.) felt a resistance over the stomach on gentle palpation. The upper GI series was not contributory (Fig. 1A), but a coldness was seen in the antrum on AMG-S (Fig. 1B). Endoscopic diagnosis was erosive gastritis (Fig. 1C). However, its biotopic diagnosis turned out to be an early microcancer (IIc) (Fig. 1E, F). He has survived 2 years and half since his subsequent subtotal gastrectomy (Fig. 1D).

Cancer may originate in areas of atrophic gastritis, and AMC-S directly and efficiently depicts such atrophic lesions (reduced blood flow, loss of cells and reduced secretory function) while x-ray silhouettes the mucosal morphology (Okuyama et al. 1979). Thus, mucosal AMG-S would help the endoscopic diagnosis by visualizing the areas of mucosal hypodynamism.

References


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Fig. 1. Early gastric cancer whose diagnosis was expedited by amogastrin-\textsuperscript{99m}Tc pertechnetate scintigraphy. A: Fluoroscopy of the stomach. No apparent abnormalities were seen. B: AMG-S. Amogastrin (300 \(\mu\)g, s.c.) was followed by \textsuperscript{99m}Tc pertechnetate (15 min, i.v.) 15 min later. This was obtained further 40 min later. An extensive coldness as marked was seen in the antrum. C: Endoscopic view. An erosive gastritis which harbored carcinoma in situ (IIe) (E, F). D: Surgical verification (IIe, 4 x 8 mm) (arrowed) (A Post S\_P\_H\_N(-)R2).