Re-appraisal of clinical usefulness of $^{67}$Ga-citrate scintigraphy for primary colorectal carcinoma: with evaluation of scintigram obtained from resected specimens

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Clinical usefulness of $^{67}$Ga-citrate scintigraphy for the diagnosis of colorectal carcinoma was reappraised at the standpoint of clinicopathological diagnosis. Fifty-eight patients with colonic carcinoma were subjected to this study. They underwent $^{67}$Ga scintigraphy before surgery. Colorectal carcinomas were detected in 38 patients, 65.5% by this procedure. Surgical specimens from thirty-seven patients underwent postoperative scanning. The scanning of the surgical specimen revealed accumulation of $^{67}$Ga-citrate in all 37 patients, suggesting that $^{67}$Ga-citrate accumulated in the carcinoma of the colon. The results suggested that detectability of carcinoma of the colon by $^{67}$Ga scintigraphy in this series was better than generally considered.

$^{67}$Ga scintigraphy was considered to provide useful information in cases of severe stenosis and dolichocolon which were difficult to diagnose with a Barium enema and fiberscope. The problem is that abnormal accumulation is sometimes hard to distinguish from physiological excretion in the stools. However we believe that images should be carefully evaluated, keeping in mind the fact that $^{67}$Ga-citrate could accumulate in a colorectal carcinoma, and also believe that we radiologists should actively promote Ba-enema examination in positive cases rather than to devote time to the differentiation between physiological excretion of $^{67}$Ga in the stools and accumulation in a colorectal carcinoma.

Key words: colorectal carcinoma, $^{67}$Ga-citrate scintigraphy