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Contrast-enhanced computed tomographic colonography in the follow-up of colorectal cancer patients: a feasibility study.

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The aim of our study was to assess whether contrast-enhanced CT colonography is a feasible alternative to both conventional colonoscopy and liver ultrasonography in the follow-up program of colorectal cancer patients. Thirty-five patients, surgically treated for colorectal cancer, underwent a follow-up program that included physical examination, carcinoembryonic antigen serum assay, conventional colonoscopy, liver ultrasonography, and chest X-ray. For these patients, we added a yearly contrast-enhanced CT colonography. All CT examinations were performed with a high-resolution protocol using a multidetector spiral CT scanner (Siemens, Erlangen, Germany) prior to and after the administration of 130 ml of i.v. contrast material. Images were directly analyzed on a dedicated workstation by two radiologists to determine colonic evaluation, visualization of colonic anastomosis, presence of polyps, and extra-colonic findings. Colonic evaluation was judged as optimal in 91.7% of all colonic segments. All mechanical surgical anastomoses were visualized with CT colonography. There was no evidence of anastomotic recurrence. Seven polyps were detected in five different patients with CT colonography, with two false-positive and no false-negative examinations. Three liver metastases and two basal pulmonary nodules were also identified. Contrast-enhanced CT colonography is a feasible alternative to both conventional colonoscopy and liver ultrasonography in the follow-up of patients operated on for colorectal cancer.

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