

Colonoscopy surveillance following adenoma removal to reduce the risk of colorectal cancer: a retrospective cohort study

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Plain English summary

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Bowel cancers develop from polyps, also called adenomas, which are growths on the lining of the bowel. Removal of adenomas, therefore, helps prevent bowel cancer. Adenomas can be detected and removed during colonoscopy, when a thin tube with a camera on one end is used to examine the bowel lining. In the UK, patients with adenomas are divided into three risk groups. Low-risk patients (i.e. those with one or two adenomas that are < 10 mm in size) are thought to be unlikely to develop bowel cancer after adenoma removal and follow-up colonoscopy is not recommended in this group. Intermediate-risk patients (i.e. those with three or four adenomas that are < 10 mm in size, or one or two adenomas with at least one \geq 10 mm in size) are recommended to have another colonoscopy 3 years after adenoma removal. High-risk patients (i.e. those with five or more adenomas that are < 10 mm in size, or three or more adenomas with at least one \geq 10 mm in size) are recommended to have another colonoscopy after 1 year and then usually again after 3 years.

The number of follow-up colonoscopies carried out is stretching health-care resources and each procedure carries a small risk of complications for patients. It is possible that too many follow-up colonoscopies are being carried out. This study aimed to determine which patients require follow-up colonoscopies and how many are required to detect adenomas and prevent bowel cancer, while also being resource-efficient, cost-effective and not exposing patients to unnecessary risks.

The study used data from 17 hospitals and cancer registries in the UK. In each risk group, one follow-up colonoscopy after adenoma removal was associated with a 40–50% reduction in bowel cancer risk. However, even without any follow-up, bowel cancer risk was no higher in some low- and intermediate-risk patients than in the general population. These patients may not need as many follow-up colonoscopies as recommended. In the case of higher-risk patients, who even after adenoma removal have a higher bowel cancer risk than the general population, follow-up colonoscopies are necessary and cost-effective.

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This report

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