Is whole-colon investigation by colonoscopy, computerised tomography colonography or barium enema necessary for all patients with colorectal cancer symptoms, and for which patients would flexible sigmoidoscopy suffice? A retrospective cohort study

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Plain English summary

WCI, CT colonography or barium enema for CRC symptoms
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What was the problem?

Diagnosing bowel cancer involves the examination of the whole large bowel. This can be unpleasant, carries risks, including the potential for damage to the bowel, and is costly. Evidence suggests that some patients could be investigated effectively by flexible sigmoidoscopy (FS), which examines the lower large bowel only. The benefits of FS are that it is safer and quicker than whole-bowel examination. A downside is that cancers in the upper large bowel could be missed, and this risk needs to be investigated.

What did we do?

We analysed whether or not symptoms could predict the location of bowel cancer in 7380 patients referred to 21 hospitals across England. We also determined how many cancers would have been missed if FS had been performed instead of whole-bowel examination.

What did we find?

Anaemia is common in patients with bowel cancer. Patients with anaemia or an abdominal mass were most likely to be diagnosed with cancer in the upper large bowel. In patients without anaemia or an abdominal mass, only 6 per 1000 with rectal bleeding and none with a change in bowel habit to looser and/or more frequent stools had cancer in the upper large bowel.

What does this mean?

For patients with certain symptoms, FS can be a clinically effective investigation and it is likely that very few upper large bowel cancers would be missed. The potential cost savings for the NHS require further analysis.
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