#GUTBlog Long-term colorectal cancer incidence after adenoma removal and the effects of surveillance on incidence: a multicentre, retrospective, cohort study

Posted on August 5, 2020 by gneame

Professor El-Omar has chosen Professor Amanda Cross, Professor of Cancer Epidemiology from the Cancer Screening and Prevention Research Group (CSPRG), Department of Surgery and Cancer, Imperial College London, to do the next #GUTBlog. The blog focusses on the paper "Long-term colorectal cancer incidence after adenoma removal and the effects of surveillance on incidence: a multicentre, retrospective, cohort study" published in Gut in September 2020. Professor Cross is the first author on this paper, supported by a team of researchers including Research Assistant, Emma Robbins and Senior Medical statistician, Kate Wooldrage.

Professor Amanda Cross

"Colorectal cancer (CRC) is a massive public health problem because it is a very common malignancy, third most common in men and in women in the UK, and it results in a large number of deaths every year, making it the second most common cause of cancer death in the UK. Fortunately, we have the potential to greatly reduce the devastating impacts of CRC. Early detection can have a huge impact on survival because when CRC is detected at stage I, 5-year survival rates are ~90%, compared to just 10% when detected at stage IV. Perhaps more importantly, CRC is amenable to prevention by the removal of its known precursor lesions (polyps).

Even after polyps have been removed, some patients remain at increased risk of CRC and so are recommended to be followed-up with further 'surveillance' exams. Surveillance exams typically involve colonoscopy, an endoscopic procedure that

Search Search

TWITTER

LATEST JOURNAL CONTENT

LETTER
Colonoscopic polypectomy in patients on anticoagulation: time to embrace the cold revolution?
8 April 2021

LETTER
Six-month follow-up of gut microbiota

allows examination of the inside of the whole colorectum. Colonoscopy is a key procedure for both CRC screening and surveillance, but it is a limited and overstretched resource in the UK and in many other countries around the world. It is also not risk free – although very rare, bowel perforation and gastrointestinal bleeding are possible complications of colonoscopy, and sedation is typically required, which itself is associated with risks.

Emma Robbins

It is therefore vital that we balance risk with resource availability to allow healthcare systems to direct surveillance colonoscopies towards patients who need them most. This means keeping the risk to patients at a minimum in terms of not missing CRCs but also not carrying out unnecessary invasive procedures.

At the time of our study, the UK post-polypectomy surveillance guidelines grouped patients with adenomas, a specific type of polyp, into three risk groups (low-, intermediate-, and high-risk), depending on the number and size of their adenomas. A different surveillance strategy was recommended for each risk group; no surveillance or surveillance after five years for low-risk patients; surveillance after three years for intermediate-risk patients; and surveillance after 12 months and then again after three years for high-risk patients. However, these guidelines had not been updated since 2002 and were mainly based on studies that looked at advanced adenomas found at follow-up rather than long-term CRC risk and were conducted in an era of lower quality colonoscopy with poorer detection abilities. We hypothesised that the guidelines were overestimating CRC risk and could be modified to reduce the burden of surveillance on patients and the NHS.

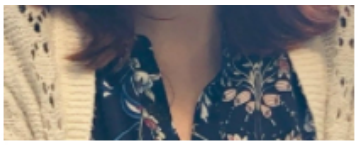
ichiness in patients with COVID-19
8 April 2021

LETTER
Appendoscopy in patients with serrated polyposis syndrome
8 April 2021

HEPATOLOGY
HCV genome-wide analysis for development of efficient culture systems and unravelling of antiviral resistance in genotype 4
8 April 2021

LETTER
Letter to editor: piecemeal cold snare polypectomy versus conventional endoscopic mucosal resection for large sessile serrated lesions
7 April 2021

CAREERS



Kate Wooldrage

To adequately address this hypothesis, we needed nationally representative data as well as a large study to adequately examine the long-term CRC risk in all three-risk groups and the effect of surveillance on CRC risk. Therefore, we assembled a retrospective cohort of approximately 30,000 patients with adenomas, using data from 17 hospitals located throughout the UK, with wide geographic coverage and an estimated catchment population of ~ 6·5 million people. Our study design allowed us to collect ~9 years of follow-up data on our cohort in a relatively short period of time.

Our analyses revealed that two thirds of our cohort did not remain at increased risk of CRC once their adenomas had been removed, compared with the general population. This included the whole low-risk group and 40% of patients classified as intermediate risk. Given their low risk of CRC, we suggested that these patients do not require surveillance and could instead be managed by routine CRC screening, which in the UK involves the faecal immunochemical test (FIT), a non-invasive stool-based test.

Although we had hypothesised that the 2002 guidelines could be modified to reduce the burden of surveillance, we were surprised by just how many patients could be removed from the surveillance pathway. These findings were used to inform the new UK post-polypectomy surveillance guidelines, published earlier this year. Crucially, these new guidelines will ensure that colonoscopy is directed towards those who really need it, while minimising unnecessary colonoscopies in patients at low risk of developing CRC. The number of surveillance colonoscopies in the UK could be reduced by 80%, which will greatly alleviate the burden of surveillance on the NHS and patients.

Going forward, we are eager to investigate the optimum interval for surveillance in those that do need it. In the new guidelines, a one-off surveillance colonoscopy after three years is recommended for high-risk patients; however, this recommendation is supported by limited evidence and warrants further study."

#GUTBlog, Colorectal cancer, Endoscopy

« PREVIOUS POST

NEXT POST »

LEAVE A REPLY

Your email address will not be published. Required fields are marked *

COMMENT *

Name *

EMAIL *

WEBSITE

Post Comment

This site uses Akismet to reduce spam. Learn how your comment data is processed.

BMJ Blogs

Comment and Opinion | Open Debate

The views and opinions expressed on this site are solely those of the original authors. They do not necessarily represent the views of BMJ and should not be used to replace medical advice. Please see our full website **terms and conditions**.

BMJ Journals