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[Intervention Review]

Follow-up strategies for patients treated for non-metastatic colorectal cancer

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ABSTRACT

Background

It is common clinical practice to follow patients with colorectal cancer (CRC) for several years following their curative surgery or adjuvant therapy, or both. Despite this widespread practice, there is considerable controversy about how often patients should be seen, what tests should be performed, and whether these varying strategies have any significant impact on patient outcomes. This is the second update of a Cochrane Review first published in 2002 and first updated in 2007.

Objectives

To assess the effects of intensive follow-up for patients with non-metastatic colorectal cancer treated with curative intent.

Search methods

For this update, we searched CENTRAL (2016, Issue 3), MEDLINE (1950 to May 20th, 2016), Embase (1974 to May 20th, 2016), CINAHL (1981 to May 20th, 2016), and Science Citation Index (1900 to May 20th, 2016). We also searched reference lists of articles, and handsearched the Proceedings of the American Society for Radiation Oncology (2011 to 2014). In addition, we searched the following trials registries (May 20th, 2016): ClinicalTrials.gov and the World Health Organization International Clinical Trials Registry Platform. We further contacted study authors. No language or publication restrictions were applied to the search strategies.

Selection criteria

We included only randomised controlled trials comparing different follow-up strategies for participants with non-metastatic CRC treated with curative intent.

Data collection and analysis

Two authors independently determined trial eligibility, performed data extraction, and assessed methodological quality.

Main results

We studied 5403 participants enrolled in 15 studies. (We included two new studies in this second update.) Although the studies varied in setting (general practitioner (GP)-led, nurse-led, or surgeon-led) and "intensity" of follow-up, there was very little inconsistency in the results.

Overall survival: we found no evidence of a statistical effect with intensive follow-up (hazard ratio (HR) 0.90, 95% confidence interval (CI) 0.78 to 1.02; I^2 = 4%; P = 0.41; high-quality evidence). There were 1098 deaths among 4786 participants enrolled in 12 studies.

Colorectal cancer-specific survival: this did not differ with intensive follow-up (HR 0.93, 95% CI 0.78 to 1.12; I^2 = 0%; P = 0.45; moderate-quality evidence). There were 432 colorectal cancer deaths among 3769 participants enrolled in seven studies.

Relapse-free survival: we found no statistical evidence of effect with intensive follow-up (HR 1.03, 95% CI 0.90 to 1.18; I^2 = 5%; P = 0.39; moderate-quality evidence). There were 1416 relapses among 5253 participants enrolled in 14 studies.

Salvage surgery with curative intent: this was more frequent with intensive follow-up (risk ratio (RR) 1.98, 95% CI 1.53 to 2.56; I^2 = 31%; P = 0.14; high-quality evidence). There were 457 episodes of salvage surgery in 5157 participants enrolled in 13 studies.

Interval (symptomatic) recurrences: these were less frequent with intensive follow-up (RR 0.59, 95% CI 0.41 to 0.86; I^2 = 66%; P = 0.007; moderate-quality evidence). Three hundred and seventy-six interval recurrences were reported in 3933 participants enrolled in seven studies.

Intensive follow-up did not appear to affect quality of life, anxiety, nor depression (reported in three studies).

Harms from colonoscopies did not differ with intensive follow-up (RR 2.08, 95% CI 0.11 to 40.17; moderate-quality evidence). In two studies, there were seven colonoscopic complications in 2112 colonoscopies.

Authors' conclusions

The results of our review suggest that there is no overall survival benefit for intensifying the follow-up of patients after curative surgery for colorectal cancer. Although more participants were treated with salvage surgery with curative intent in the intensive follow-up group, this was not associated with improved survival. Harms related to intensive follow-up and salvage therapy were not well reported.

PLAIN LANGUAGE SUMMARY

Follow-up strategies for participants treated for non-metastatic colorectal cancer

What is the issue?

Colorectal cancer affects about 1 in 20 people in developed countries. Most patients (about two thirds) have curable disease. Follow-up after curative treatment usually means visits to the doctor as well as having some tests. Many people believe that follow-up saves lives, but we are not sure how often the patient should see the doctor and what tests they should have, and when.

Why is it important?

Follow-up is expensive, it can make patients anxious around the time of their visit, and can be inconvenient. Tests are expensive and can have side effects. If tests find that cancer has come back in a person who feels well, but treatment cannot cure them, finding the recurrent cancer may not have helped that person or their family.

We asked...

We asked if follow-up (i.e. tests and doctor visits) after colorectal cancer has been treated curatively is helpful. We looked at all different kinds of follow-up: some versus none; more tests versus fewer tests; and follow-up done by surgeons, general practitioners (GPs), or nurses.

We found...

We found 15 studies, including 5403 participants. We found that follow-up did not improve overall survival (high-quality evidence), colorectal cancer-specific survival (moderate-quality evidence), or relapse-free survival (moderate-quality evidence). If patients have follow-up, they are much more likely to have surgery if the cancer is detected again (high-quality evidence). With follow-up, more asymptomatic "silent" cancer relapses are likely to be found at planned visits (moderate-quality evidence). Harms from tests were not common, but only two studies reported them (moderate-quality evidence). We found very little data on quality of life or costs.

This means...

The information we have now suggests that there is little benefit from intensifying follow-up, but there is also little evidence about quality of life, harms, and costs. We do not know what is the best way to follow patients treated for non-metastatic colorectal cancer, or if we should at all. We know little about the costs of follow-up in this setting. However, we found four ongoing trials (which will enrol a further 4801 participants); they will look at quality of life, harms, and costs, and may reveal a better understanding of what is the best follow-up programme. Consumer needs and concerns with respect to the value of follow-up require further research.