Comparing Intensity of Follow-Up Tests after Surgery for Colorectal Cancer

What was the research about?
Regular follow-up tests can help patients who have had surgery for colorectal cancer find out if the cancer has come back. These tests may include CT scans or other imaging scans and blood tests. But researchers don’t know if having more tests works better for patients than having fewer tests.

In this study, the research team compared health data for patients who received care at two types of clinics:

- **Clinics that gave patients more tests.** At these clinics, patients received an average of 2.9 imaging scans and 4.3 blood tests over three years.

- **Clinics that gave patients fewer tests.** At these clinics, patients received an average of 1.6 imaging scans and 1.6 blood tests over three years.

What were the results?
Being in a clinic that gave more or fewer tests made no difference in

- How often tests found that patients’ cancer came back
- How often patients had a second surgery to treat colorectal cancer
- How likely patients were to live five years after their first surgery

Overall, after five years, 19 percent of patients had colorectal cancer that came back. Patients who had more advanced cancer were more likely to have cancer that came back.

Who was in the study?
The research team looked at data from a national cancer registry and health records for patients who had had surgery for stage I–III colorectal cancer between 2006 and 2007. Of these, 4,341 patients went to clinics that gave more tests, and 4,188 went to clinics that gave fewer tests. Among patients, 86 percent were white, 10 percent were African American, and 4 percent were of another race. The average patient age was 68, and 52 percent were women.

What did the research team do?
The research team looked at patient records to see how often patients got follow-up tests at 1,175 clinics. Then the team compared patients who had follow-up tests at clinics that gave more tests and clinics that gave fewer tests. The team looked at patients’ health for up to five years after their original surgery.

A group of patients, doctors, and health professionals helped design the study and analyze the data.

What were the limits of the study?
Results may have been different if researchers had used other ways to categorize clinics into groups that give more versus fewer tests. The team compared patients based on the type of clinic they went to for follow-up tests. But some patients at the clinics that gave more tests might have had fewer tests.
Future research could use a different study design to compare follow-up methods, such as following patients who have more versus fewer tests going forward.

How can people use the results?
Patients who have had colorectal cancer and their doctors can use the results to discuss how often to have follow-up tests.

To learn more about this project, visit www.pcori.org/Chang241.