Researchers Identify Three Different Genetic Subtypes of Colorectal Cancer

Gastrointestinal Cancers Symposium
January 22, 2013

Recently, researchers developed a new way to classify stage II and III colorectal cancers based on gene expression (which genes within each tumor are turned on or off) into three separate subtypes. Each of these subtypes helps predict a patient?s prognosis (chance of recovery) and how a tumor responds to adjuvant chemotherapy (chemotherapy given after treatment). Previously studied genetic tests, such as Oncotype or ColoPrint, can help doctors find out which tumors are more likely to grow and spread quickly, but there are still no clear recommendations for identifying which patients should receive adjuvant chemotherapy and which patients wouldn?t benefit from additional chemotherapy..

In this study, researchers created a system to classify colorectal cancers based on gene expression information from the tumors of 188 patients. This system was then used to divide the tumors from 543 different patients with stage II and III colorectal cancer into three groups or tumor subtypes, called A, B, and C. After 10 years, researchers found that patients with subtype C had a poorer prognosis and were not likely to benefit from adjuvant chemotherapy. Patients with subtypes A and B did benefit from adjuvant chemotherapy and had a better prognosis. The differences between the three subtypes was based on specific tumor features that are known to affect how well treatment works, such as how quickly a tumor is likely to grow and whether a tumor is more likely to have many changes to its genes.

What this means for patients

?This study clearly shows that there are different subtypes in colorectal cancer with completely different characteristics,? said study co-author Josep Tabernero, Director of Clinical Research at Vall d?Hebron Institute of Oncology in Barcelona, Spain. ?We hope that we?ll be able to develop new tests based on this classification system not only to identify patients who need more intense adjuvant treatment but also help us to predict which drugs and targeted therapies will work best for each patient.? This test is still being researched and only available in clinical trials. Talk with your doctor about your treatment options and how your treatment recommendations are determined.

Questions to Ask Your Doctor

- What stage of colorectal cancer do I have? What does this mean?
- What are my treatment options?
- What treatments do you recommend? Why?
- Do you recommend chemotherapy after surgery?
- What clinical trials are open to me?

For More Information

Guide to Colorectal Cancer [1]

Facts About Personalized Cancer Medicine [2]

Clinical Trials [3]

Links:
[1] http://www.cancer.net/cancer-types/colorectal-cancer
[2] http://www.cancer.net/all-about-cancer/cancernet-feature-articles/cancer-basics/facts-about-personalized-cancer-medicine
[3] http://www.cancer.net/all-about-cancer/clinical-trials