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ASIA EDITION

China develops novel 'bacterial gene markers' test for early detection of colon cancer

July 29, 2021 | News

The novel test can spare patients from an unnecessary colonoscopy



The faecal immunochemical test (FIT) is commonly used to screen for colorectal cancer but it has low sensitivity (around 50%) for early cancer detection and fails to detect polyps.

The Faculty of Medicine at The Chinese University of Hong Kong (CU Medicine) in China has developed the world's first faecal "bacterial gene markers" test (M3) based on metagenomic analysis of over 1,100 cancer subjects.

The sensitivity of this non-invasive test is 94% for colorectal cancer detection which is comparable to that of a colonoscopy.

The test can also accurately detect polyp recurrence with over 90% sensitivity. It is the first test to offer a non-invasive approach to screen for polyp recurrence.

The novel test can spare patients from an unnecessary colonoscopy thus reducing the risk of invasive testing and the pressure on medical services.

Professor Francis KL CHAN, Dean of Medicine and Director of the Centre for Gut Microbiota Research at CU Medicine, regarded this new innovation as a prime example of successful translational research whereby scientific findings can be transformed into a clinical screening tool. He remarked, "Globally, approximately 2,800 million people are eligible for colorectal cancer screening. The potential of bacterial gene markers is huge. Not only can it assist us in prioritising medical resources, it will also bring benefit to both individual patients and society as a whole."