High risk of bowel cancer for gene carriers

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Researchers from the University of Melbourne have found that screening for bowel cancer in genetically high-risk populations should begin early.

The team led by Professor Mark Jenkins, Centre for Epidemiology and Biostatistics, School of Population and Global Health found that people with a mutation that results in a condition called Lynch Syndrome have a five year risk of bowel cancer up to hundreds of times greater than the average risk.

Professor Jenkins and collaborators including researchers at the University of Lyon, France studied carriers with mutations in the DNA repair genes. Carriers have a high risk of several types of cancers including bowel, uterus and stomach cancers.

Professor Jenkins estimates that approximately one in 1,000 people or up to 25,000 Australians have this inherited cancer predisposition.

"These are the first estimates of short-term risk of bowel cancer in mutation carriers and justify frequent screening by colonoscopy especially once they reach their thirties," Professor Jenkins said.

"Colonoscopy can prevent cancer by detecting polyps before they become cancer, and can detect bowel cancer early when it is easily treatable. At-risk people can also reduce their risk of cancer by taking regular aspirin," he said.

For such mutation carriers, current guidelines recommend a colonoscopy every one to two years starting in their mid twenties. The findings recently published in the *Journal of Clinical Oncology* support this recommendation for screening from age 30 years.

"The best indicator of being at risk of bowel cancer is having a close relative who has bowel cancer, especially if they were diagnosed before 50 years of age. General practitioners can provide advice and referrals to Family Cancer Clinics for testing in each state in Australia," Professor Jenkins said.

Provided by University of Melbourne