

LYNCH SYNDROME SCREENING IN MANITOBA

It is estimated that two to three percent of colorectal cancers are related to Lynch syndrome. Lynch syndrome is a hereditary cancer syndrome with autosomal dominant inheritance. It is associated with an increased risk of developing colon and endometrial cancers, as well as other cancers such as stomach, ovarian, bile duct, small bowel, urothelial, brain (glioma), and sebaceous neoplasms. It is due to a germline mutation in one of the DNA mismatch repair (MMR) genes (MLH1, MSH2, MSH6, PMS2) or the EPCAM gene. Typically, these individuals are diagnosed with cancer at an earlier age (<50years) and will often have additional 1st degree relatives with Lynch-related tumors involving different generations. While many people with Lynch syndrome will have a family history of these cancers, some will not

What Manitoba physicians need to know:

- As of October 2013, individuals in Manitoba diagnosed with colon cancer at age 70 or younger will have been screened for Lynch syndrome using the tumor resection specimen.
- Screening for Lynch syndrome uses immunohistochemistry (IHC) to test for MMR proteins in the colon tumor.
- MSI (microsatellite instability) analysis, an additional screen for Lynch syndrome, may be performed on a case-by-case basis or by special request. Results will be reported as an amendment to the patient's surgical pathology report.

- Individuals with a positive screen should be referred to the WRHA Program of Genetics & Metabolism for assessment and consideration of genetic testing for Lynch syndrome.

Genetic testing for hereditary cancer syndromes is usually initiated in individuals who have had a cancer diagnosis. Referrals for unaffected individuals with strong family histories of cancer are also accepted to discuss appropriate cancer screening, and to determine if anyone in the family meets genetic testing criteria.



Referral forms and further information can be found at:
<http://www.wrha.mb.ca/prog/genetics/hereditary-cancer-service.php>

Any further questions regarding genetic testing for Lynch syndrome and cancer genetics can be directed to:

Cancer Genetic Counsellor

WRHA Program of Genetics & Metabolism

P: 204-787-4267