

Hereditary Non Polyposis Colorectal Cancer: What You Should Know



Hereditary Non Polyposis Colorectal Cancer is also known as the Lynch Syndrome. These are rare hereditary disorders that usually cause cancer to develop either in the colorectal area or in other sites.

Hereditary Non Polyposis Colorectal Cancer (HNPCC) also known as the Lynch syndrome, is an inherited cause of cancer of the bowel.

Lynch syndrome is a rare disorder also known as hereditary nonpolyposis colorectal cancer (HNPCC) syndrome. Though not a cancer in its own right, Lynch syndrome strongly predisposes people who have this inherited defect to develop colorectal cancer as well as several other types of cancer. The condition is named after Henry Lynch, a doctor and authority on inherited cancers.

Lynch syndrome is caused by mutations or alterations of particular genes. People with Lynch syndrome have more than an 80 percent chance of developing colorectal cancer during their lifetime. Colorectal cancer is relatively common, but only about 3 percent to 4 percent of all colon cancer cases are attributable to Lynch syndrome.

When colorectal cancer is associated with Lynch syndrome, it tends to occur at a younger age than in most other colorectal cancer cases. If your family history suggests that Lynch syndrome may be present, genetic testing can determine if you have Lynch syndrome so that you can consider steps to either prevent the development of colon cancer or at least detect it at an earlier, more treatable, stage.

What are the symptoms of HNPCC?

When cancer does occur in people with Lynch syndrome, most cases arise in the right side of the colon. Colorectal cancer associated with Lynch syndrome tends to occur in people at a younger age than for people with the more common nonhereditary forms of colorectal cancer.

In addition to the presence of early polyps, the colorectal cancers associated with Lynch syndrome share many of the same signs and symptoms as other types of colorectal cancer. Although these cancers are often "silent" or symptom-free in their early stages, the following signs and symptoms may be present as the cancer becomes more advanced:

- Changes in bowel habits – for example, constipation or diarrhea that persists for longer than several days
- Visible blood in the stool, which may indicate rectal bleeding

- Black, tarry stool, which may represent bleeding above the rectum
- Iron deficiency without another identifiable cause
- Abdominal cramps or pain
- Feelings of fatigue or weakness
- A decline in appetite
- Unexplained weight loss

What is HNPCC caused by?

Lynch syndrome runs in families. You can inherit it from either parent in an autosomal dominant inheritance pattern. If you have this condition, there's a 50 percent risk of passing the mutated gene to your children.

The defective gene inherited in Lynch syndrome is responsible for correcting mistakes that may occur when DNA replicates in normal cells. DNA is the genetic material that contains instructions for every chemical process in the body. When our normal cells grow and divide, they must first make a new copy of their entire DNA. It's not uncommon for some minor mistakes to be made during this process, but normal cells have repair mechanisms to recognize when a mistake has been made, and to repair that mistake before a cell divides to form two new cells. However, people who inherit the abnormal gene associated with Lynch syndrome lack the ability to repair these minor mistakes. An accumulation of these mistakes leads to increasing genetic damage within cells and eventually can lead to the cells becoming cancerous.

Additional Resources:

Mayo Clinic

www.mayoclinic.com

Creighton University School of Medicine

<http://medicine.creighton.edu>

For More Information:

Nebraska Colon Cancer Screening Program

301 Centennial Mall South, P.O. Box 94817

Lincoln, Nebraska 68509-4817

Phone: 1-800-532-2227 TDD: 1-800-833-7352 Fax: 402-471-0913