Genetics and Cancer

We all have some risk of developing cancer during our lifetimes. Most cancer is “sporadic” or by chance. However, some people may develop cancer in part due to changes in hereditary factors called genes.

Genes are present in every cell in our body, contained in structures called chromosomes, which are found in the nucleus of a cell. Damage, or a change in the structure of a gene, may cause the gene not to function properly. These genetic changes are called mutations.

Hereditary cancer is the development of cancer due to an inherited gene mutation that has been passed from a parent to a child. If you have inherited a gene mutation, you also have inherited an increased risk of developing cancer in your lifetime.This inherited risk of developing cancer is greater than the risk of someone in the general population.

Over the past twenty years, specific genes have been identified that may contribute to the development of hereditary breast, ovarian, colorectal, endometrial and other cancers. People who are interested in learning whether or not they may have inherited a gene mutation should talk to their healthcare provider about a consultation with a Cancer Risk Assessment Counselor.

Genetic Counseling

A meeting with St. Luke’s Cancer Risk Assessment Counselor involves a discussion of you and/or your family’s cancer history. The goal is to provide clear information about your individual risks and whether or not genetic testing would be appropriate.

Genetic Testing

Testing for a mutation involves a simple blood test, but deciding whether or not to undergo genetic testing is a personal choice should be made only after all of your questions have been answered. Whether or not you decide to undergo testing, you will be given a personal risk assessment of your chances of developing cancer, and the ways you can help prevent this.

For more information about St. Luke’s Cancer Risk Assessment Services call 319/369-7816.