MUSKOKA ALGONQUIN HEALTHCARE

Health Link

Laboratory Staff – The Unsung Cancer Detectives

Working behind the scenes and often for hours behind the microscope are members of the laboratory department at Muskoka Algonquin Healthcare (MAHC).

You might never see them, but their impact on patient care is broader than you may think.

Many of us know that April is Cancer Awareness Month, but how many of us realize the influence laboratory staff have on the management of cancer.

At both of MAHC's hospital sites, the laboratories are just one of many health care disciplines that play a vital role in the diagnosis and treatment of cancer.

The fact is that detection of several types of cancer starts in the lab through meticulous screening of blood, cells and tissues 24 hours a day, seven days a week.

There are approximately 40 lab staff at MAHC, including technologists, technicians and transcriptionists working in pathology (cytology/histology), haematology, transfusion medicine, chemistry and microbiology.

Each of these lab specialties contribute to the fight against cancer.

On the front lines, lab technicians draw blood from the patient so it can be tested in the lab. Behind the scenes, laboratory tests assess patient health, aid in the diagnosis of cancer, and provide the vital information that guides medical decisions.

In the pathology department, MAHC employs one cytotechnologist who screens gynaecological cases like pap smears, fluids and fine needle biopsies of breasts for precancerous and cancerous cellular changes and notes abnormalities.

MAHC also employs histotechnologists who prepare and process tissue biopsies for microscopic examination.

These health care professionals work hand-in-hand with the pathologist, who makes the final diagnosis. Last year, MAHC's pathologist scanned over 28,000 pieces of tissue for cancer.

Lab staff working in haematology and transfusion medicine support cancer patients receiving chemotherapy treatment or radiation.

The patient undergoes regular blood tests throughout their treatment and red and white blood cell and platelet counts are monitored by haematology to help determine the chemo treatment schedule.

A white blood cell count that is too low will indicate that the patient's health will be at risk if they are given the treatment, while a low red blood cell count may indicate the need for a blood product transfusion. Improved cancer treatments continue to reduce the number of transfusions that patients require.

The clinical chemistry component of the laboratory also analyzes blood and fluids to monitor abnormalities due to cancerous conditions such as the PSA test for prostate cancer.

Microbiology plays an important role in detecting infections in cancer patients whose immune systems have been compromised and are more susceptible to infection.

Last year, over one million test results were reported by the MAHC laboratories.

It's a good reminder that knowing matters.

Health Link is an awareness column brought to you on behalf of Muskoka Algonquin Healthcare.