

Health is not a condition of matter, but of mind

Written by Justin Newman, medical student

Cancer Treatments

After talking to a few friends of mine, I realized the basic approach to cancer treatment is something that many people do not understand very well.

There are many different types of cancer that can exist in the body, each coming from different types of cells from different organs. Please understand different types of cancers are found in different ways and that the diagnosis, prognosis and treatment for different types of cancer can vary widely.

When a doctor first suspects a person has cancer, the first thing the doctor has to do is to make a diagnosis to be sure what the patient actually has. This is generally done by taking a sample of the suspected cancer by what is called a biopsy.

A piece of the cancer is put under a microscope and a doctor who specializes in this, called a pathologist, will look at the cells in order to figure out what they are. This doctor will be able to tell what type of cells there are, what part of the body they came from, and can often tell how aggressive the type of cancer is by looking at how much those cells are invading the cells and other organs and structures around it.

Once the type of cancer is discovered, the doctors will need to figure out if the cancer has spread, and if so, how far. They will look at the area where the cancer was found to see if the piece that was removed was all of the cancer cells. They may then have to look to see if the cancer cells have spread in the local area, and then maybe to the more distant parts of the body.

When a cancer has left its original location and spread to other parts of the body, this spread is called a metastasis. This generally means the cancer is at an advanced stage, meaning it is more difficult to treat. Some types of cancers will spread through the lymph nodes, some will spread through the blood and some will mostly grow into the organs that are nearest by physically pushing through and into them.

If the cancer is found to be in one place, a surgeon may be able to remove that area of cancer. If the cancer has spread to other parts of the body, surgery to remove the cancer areas is not able to cure the person, since the cancer has likely already spread to other places within the body. There are occasionally surgeries to remove parts of these other cancer tumors, often if their size is affecting the function of other parts of the body.

There are two types of common treatments for cancer: radiation and chemotherapy. These are both therapies that have the goal of getting the cancer out of the body.

Radiation is a therapy that targets a beam of radiation at the cancer tumor or the area around where a tumor was removed. The radiation will kill the cells it is focused on, hopefully allowing the doctors to kill the traces of cells that remain after the majority of the tumor has been removed.

Chemotherapy is a different type of treatment. Certain chemicals are put into the body, and most of these chemicals target new or fast growing cells. Since cancer cells are those that grow faster and in a different way than normal cells, the chemotherapy will focus on killing the cancer cells.

There are other fast growing cells within the body. For example, hair cells. This is the reason certain people will lose their hair while undergoing chemotherapy; the fast growing hair cells are affected with the chemotherapy at the same time the fast growing cancer cells are affected.

Different types of chemotherapy are used to target different types of cancer and now there are many different types of chemotherapy and combinations of chemotherapy.

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This column is about health related issues with a focus on a rural community. The purpose of this column is to be informative and to comment on interesting medical and health related topics. Any questions or concerns that may arise regarding topics covered by this article should be addressed to your primary care doctor.

Justin can be reached by email at Justin.Tyler.Newman@gmail.com with comments or ideas for topics that you may desire to be addressed in this column. The goal of this column is that you find it not only entertaining and informative but also that it creates a desire to take a life-long interest your health and body.