

Immunotherapy: Way towards Life

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Description

Immunotherapy is a type of cancer treatment that helps your immune system fight cancer. The immune system helps your body fight infections and other diseases. It is made up of white blood cells and organs and tissues of the lymph system.

As part of its normal function, the immune system detects and destroys abnormal cells and most likely prevents or curbs the growth of many cancers. For instance, immune cells are sometimes found in and around tumors. These cells, called tumor-infiltrating lymphocytes or TILs, are a sign that the immune system is responding to the tumor. People whose tumors contain TILs often do better than people whose tumors don't contain them. Even though the immune system can prevent or slow cancer growth, cancer cells have ways to avoid destruction by the immune system. For example, cancer cells may: Have genetic changes that make them less visible to the immune system; Have proteins on their surface that turn off immune cells; Change the normal cells around the tumor so they interfere with how the immune system responds to the cancer cells. Immunotherapy helps the immune system to better act against cancer.

Several types of immunotherapy are used to treat cancer. These include: Immune checkpoint inhibitors, T-cell transfer therapy, T-cell transfer therapy may also be called adoptive cell therapy, adoptive immunotherapy, or immune cell therapy. Monoclonal antibodies may also be called therapeutic antibodies, Treatment vaccines, and Immune system modulators. Immunotherapy drugs have been approved to treat many types of cancer. However, immunotherapy is not yet as widely used as surgery, chemotherapy, or radiation therapy. Immunotherapy can cause side effects, many of which happen when the immune system that has been revved-up to act against the cancer also acts against healthy cells and tissues in your body. Immunotherapy treats many types of cancer effectively. But like other cancer treatments, they are powerful medications that can cause changes within the body or to how you feel, called side effects. These side effects are different for everyone. They depend on the type of immunotherapy, the type of cancer, its location, your general health, and other factors. Immunotherapy may also cause the immune system to attack healthy cells. This can cause side effects, also called "immune-related adverse events." These may occur at any time during treatment or sometimes even after stopping immunotherapy. Different types of immunotherapy cause different side effects. That's why it is important to talk with your doctor about the type of immunotherapy used for your cancer, the goals of treatment, and the potential side effects of your immunotherapy.

Different forms of immunotherapy may be given in different

ways. These include- Intravenous (IV): The immunotherapy goes directly into a vein, Oral: The immunotherapy comes in pills or capsules that you swallow, Topical: The immunotherapy comes in a cream that you rub onto your skin. This type of immunotherapy can be used for very early skin cancer. Intravesical: The immunotherapy goes directly into the bladder. Some types of immunotherapy given in cycles. A cycle is a period of treatment followed by a period of rest. The rest period gives your body a chance to recover, respond to immunotherapy, and build new healthy cells.

References

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