

A Short Note on Cancer Therapies and Their Benefits

Vincent Amoako-Arhen*

Department of Oncology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Description

There are several alternative cancer treatments to chemotherapy, including immunotherapy, photodynamic therapy, and laser therapy. Due to the potentially serious side effects of chemotherapy, some patients prefer these alternatives. Chemotherapy kills malignant cells, and while it is effective and saves lives, it is also extremely harmful. Nausea, vomiting, hair loss, exhaustion, and anemia are serious side effects. Other treatments or procedures, such as radiation therapy or surgery, may be needed before or after chemotherapy

Photodynamic therapy

Photodynamic therapy (PDT) is a cancer treatment that activates medications that kill cancer cells using light from a laser or other light source. PDT is often used by doctors as a local therapy to treat a specific body region. PDT has been approved by the Food and Drug Administration (FDA) to treat a variety of malignancies and pre-cancers, including:

- Actinic keratosis advanced cutaneous T-cell lymphoma
- Barrett's esophagus
- Basal cell skin cancer
- Non-small cell lung cancer

PDT may also be used by doctors to help with the symptoms of certain malignancies that restrict the airways or throat. PDT, on the other hand, can only be used to treat tumors that are on the surface of the skin, immediately beneath the epidermis, or in the lining of organs and cavities. PDT entails the administration of a photosensitizer medication orally, topically on the skin, or straight into a vein. The cancer cells absorb the medication in 24–72 hours, after which doctors expose them to light. When light and drug are combined, oxygen is produced, which kills cancer cells.

Benefits

PDT avoids extensive damage as the drugs leave healthy cells and accumulate in cancerous cells. It also leaves no scars, making it an excellent choice for those with skin malignancies or pre-cancers.

Laser therapy

A doctor uses a focused light beam to heat and eliminate tiny tumors and precancerous growths with laser therapy. They can also use it to treat symptoms like bleeding and reduce tumors that block parts of the digestive tract. Following surgery, surgeons may use a laser to shut nerve endings or lymph veins, which decrease pain and swelling while also preventing tumor cells from spreading. To activate the photosensitizing agent; doctors may employ lasers as part of PDT.

Benefits

The laser is precise, allowing doctors to remove tumors without causing damage to adjacent tissues, resulting in less pain, bleeding, infection, and scarring. Procedures may take less time than with standard tools, according to surgeons.

Immunotherapy to treat cancer

Immunotherapy is a biological therapy that aids in the control and elimination of cancer by enhancing a person's natural defenses. Immunotherapy comes in a variety of forms. It works by instructing the immune system to recognize and fight cancer cells, as well as boosting immune cells and improving immunological response.

Benefits

Because immunotherapy harnesses the power of the individual's immune system, it can target cancer cells precisely while protecting healthy cells from harm.

Targeted therapy

Targeted therapy is doctors using precision medicines to treat people on an individual basis rather than treating them as a group. Small molecule medications that can easily penetrate cells or monoclonal antibodies that attach to specific targets on cancer cells are examples of these therapies. Targeted therapy is a type of cancer treatment that targets the changes in cancer cells and helps them to grow, divide, and spread.

Benefits

Because these therapies are precise, they can attack cancer cells while leaving a person's healthy cells intact. They may help

*Address for Correspondence: Dr. Vincent Amoako-Arhen, Department of Cancer, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; E-mail: AmoakoArhen@gmail.com

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Received date: September 02, 2021; Accepted date: September 16, 2021; Published date: September 23, 2021

the immune system destroy cancer cells, Inhibit cancer cells from proliferating, stop tumors from creating new blood vessels, provide lethal compounds to cancer cells, or deprive some cancers of the hormones they require to thrive.

Radiation therapy

Radiation therapy is a type of cancer treatment that uses high doses of radiation to kill cancer cells and shrink tumors. Learn more about the types of radiation, why they have side effects, what they might have, and much more.

Surgery

When used to treat cancer, surgery is a procedure in which a surgeon removes cancer from your body. Learn the different ways that surgery is used against cancer and what you can expect before, during, and after surgery.

How to cite this article: Amoako-Arhen, Vincent. "A Short Note on Cancer Therapies and Their Benefits." *J Cancer Sci Ther* 13 (2021) : e495.