

## Chemotherapy: A Crucial Weapon in the Fight against Cancer

Maria Davern \*

Department of Human Molecular Genetics and Biochemistry, Tel Aviv University, Tel Aviv, Israel

### DESCRIPTION

Chemotherapy is a medical treatment that involves the use of powerful drugs to kill cancer cells in the body. This type of therapy is often used to treat cancer that has spread to other parts of the body or cancer that is difficult to treat with other methods, such as surgery or radiation therapy.

Chemotherapy works by targeting rapidly dividing cells in the body, which includes cancer cells as well as some healthy cells. The drugs used in chemotherapy can be given in a variety of ways, such as through an IV (intravenous) line, orally as a pill, or injected directly into the affected area. While chemotherapy can be effective in treating cancer, it can also have a range of side effects. Some of the most common side effects include hair loss, nausea, vomiting, fatigue, and increased risk of infection. These side effects can be managed with medications and other treatments, but they can still be difficult for patients to deal with.

In addition to its physical effects, chemotherapy can also have a significant emotional impact on patients. Many people undergoing chemotherapy experience anxiety, depression, and other psychological symptoms, which can be compounded by the stress of dealing with a serious illness.

Despite its challenges, chemotherapy remains an important treatment option for many people with cancer. Advances in medical research and technology continue to improve the effectiveness of chemotherapy and reduce its side effects, and ongoing efforts to develop new cancer treatments are offering hope for a future without this disease. Chemotherapy is a medical treatment that uses powerful drugs to kill rapidly dividing

cancer cells in the body. It is a systemic treatment, which means that it can affect the entire body, rather than just a specific area. Chemotherapy is one of the most common treatments for cancer, and it can be used alone or in combination with other treatments, such as surgery or radiation therapy.

Chemotherapy drugs work by targeting and destroying cancer cells, which divide rapidly and uncontrollably. However, these drugs can also affect healthy cells that divide rapidly, such as those in the bone marrow, hair follicles, and digestive tract. This is why chemotherapy often causes side effects, such as fatigue, hair loss, nausea, and vomiting.

The administration of chemotherapy varies based on the type and severity of cancer undergoing treatment. It may be administered orally in the form of a capsule or intravenously through an injection or infusion. Some chemotherapy drugs are also given topically, as a cream or lotion. The duration and frequency of chemotherapy treatment vary depending on the individual's specific condition and response to the treatment.

Chemotherapy can be given in cycles, with periods of treatment followed by periods of rest to allow the body to recover. The length and frequency of each cycle can vary depending on the specific drugs being used and the individual's response.

Chemotherapy can be a challenging and difficult treatment, both physically and emotionally. However, it can also be an effective way to fight cancer and improve a patient's quality of life. If a patient is provided with chemotherapy treatment, it is important to work closely with the healthcare team to understand the treatment plan and manage any side effects that may arise.

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**Correspondence to:** Maria Davern, Department of Human Molecular Genetics and Biochemistry, Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; E-mail: mariadavern15@gmail.com

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