

Intervention of chemotherapy against cancer: A new medical era.

Prakash Kumar*

Department of Radiology, Utkal University, Bhubaneswar, India

Description

Cancer chemotherapy is a modality of cancer therapy that involves the injecting of chemical agents to kill the cancer cells. Cancer chemotherapy aims to cure where possible and where alleviative cure is impossible. The effective use of chemotherapy needs a deep understanding of the principles of tumour biology, cellular kinetics, pharmacology, and drug resistance. Various Principles of chemotherapy include: Chemotherapy intends to destroy as many tumour cells as possible with minimal effect on healthy cells, Cancer cells depend on the same mechanism for cell division that is found in normal cells, and Damage to those mechanisms leads to cell death [1]. Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. Chemotherapy can be used to cure cancer, lessen the chance it will return or stop or slow its cell growth. Chemotherapy can be used to shrink tumours that are causing pain and other problems. The latest advances in cancer treatment have created a whole new outlook on cancer treatment, Chemotherapy causes damage to both healthy cells and the cancerous cells we are aiming to destroy, this leads to multiple complications following chemotherapy, these often require medical supervision [2].

Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. Chemotherapy can be used to cure cancer, lessen the chance it will return or stop or slow its cell growth. Chemotherapy can be used to shrink tumors that are causing pain and other problems. Chemotherapy is used to treat many types of cancer. For some people, chemotherapy may be the only treatment you receive. But most often, you will have chemotherapy and other cancer treatments. The types of treatment that Patients need depend on the type of cancer they have [3].

The chemotherapy is injected into the space between directly into a vein. The chemotherapy is given by a shot in a muscle in your arm, thigh, or hip or right Intraperitoneal [4].

The chemotherapy goes directly into the peritoneal cavity, which is the area in your body that contains organs such as your intestines, stomach, and liver. Intra Arterial (IA). The chemotherapy is injected directly into the artery that leads to cancer [5].

The latest advances in cancer treatment have created a whole new outlook on cancer treatment.

Conclusion

Chemotherapy can treat cancer cells that are spread all over the body but they have extremely toxic side effects. All of these treatments are still in use today and will probably be in use for a while although they will not be the only kind of treatments, instead of chemotherapy we can go for Laser therapy, Hormonal therapy, Immunotherapy, Targeted therapy, and others.

References

1. Pui CH, Relling MV, Downing JR. Acute lymphoblastic leukemia. *N Engl J Med*. 2004;350(15):1535-1548.
2. Lowenberg B, Downing JR, Burnett A. Acute myeloid leukemia. *N Engl J Med*. 1999;341(14):1051-1062.
3. Sawyers CL. Chronic myeloid leukemia. *N Engl J Med*. 1999;340(17):1330-1340.
4. Sell S. Leukemia. *Stem cell reviews*. 2005;1(3):197-205.
5. Chiorazzi N, Rai KR, Ferrarini M. Chronic lymphocytic leukemia. *N Engl J Med*. 2005;352(8):804-815.

*Correspondence to:

Prakash Kumar
Department of Radiology,
Utkal university,
Bhuwaneshwar,
India
E-mail: prakumar@gmail.com

Citation: Kumar P. Intervention of chemotherapy against cancer: A new medical era. *J Mol Oncol Res*. 2021;5(1): 4.