Chemotherapy

Is the drugs used to treat cancer , act by killing cells that divide rapidly, one of the main properties of most cancer cells .

All of these drugs affect cell division or DNA synthesis and function in some way.

Combined modality chemotherapy is the use of drugs with other cancer treatments, such as radiation therapy or surgery

Neoadjuvant chemotherapy (*preoperative* treatment) initial chemotherapy is designed to shrink the primary tumour, thereby rendering local therapy (surgery or radiotherapy) less destructive or more effective.

Adjuvant chemotherapy (*post*operative treatment) can be used when there is little evidence of cancer present, but there is risk of recurrence. This can help reduce chances of developing resistance if the tumour does develop. It is also useful in killing any cancerous cells which have spread to other parts of the body. This is often effective as the newly growing tumours are fast-dividing, and therefore very susceptible.

Palliative chemotherapy is given without curative intent, but simply to decrease tumor load and increase life expectancy.

Depending on the patient, the cancer, the stage of cancer, the type of chemotherapy, and the dosage, intravenous chemotherapy may be given on either an inpatient or an outpatient basis .Most chemotherapy is delivered intravenously, although a number of agents can be administered orally or intramuscular .

Adverse effects

The most common medications mainly affect the fast-dividing cells of the body, such as blood cells and the cells lining the mouth, stomach, and intestine.

Depression of the immune system, which can result in potentially fatal infections.

Gastrointestinal distress. Nausea and vomiting are common side effects , These side effects can frequently be reduced or eliminated with antiemetic drugs

Hair loss , These are temporary effects: hair usually starts growing back a few weeks after the last treatment

Other side effects ,Cardiac ,hepatic , nephrotoxicity ,secondary neoplasm ,infertility .