

SIDE-EFFECTS OF CHEMOTHERAPY

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TYPES OF

CANCER TREATMENTS

01

SURGICAL

Surgical removal of cancerous cells

02

RADIATION

Use of radiation therapy to eradicate cancer cells

03

CHEMOTHERAPY

Chemical & medicinal treatment for cancer

04

BIOLOGICAL

treatment uses the body's immune system to kill cancer cells



CHEMOTHERAPY

A type of cancer treatment that uses one or more anti-cancer drugs as part of a standardized chemotherapy regimen.



SIGNIFICANCE OF THE SIDE-EFFECTS

- Patient care
- Planning out chemo – sessions
- Risk – factors
- Patient survival
- Curability?

CHEMOTHERAPY AGENTS?

THE CHEMICALS TARGET PROCESSES IN THE CELL CYCLE ,
DAMAGING CANCER AND NORMAL CELLS AS WELL

These are present in
chemotherapy
medications

- Alkylating Agents
- Anti – Metabolites
- Anti – Tumour Antibiotics
- Topoisomerase inhibitors
- Anti- Microtubule agents
- Hormonal agents



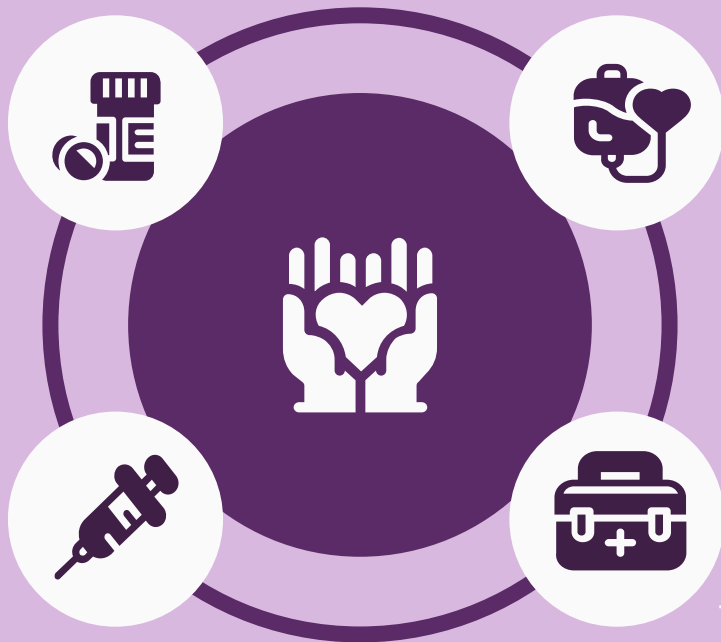
METHODS OF ADMINISTERING CHEMOTHERAPY

01 ORAL MEDICATIONS

Traditionally prescribed medications that can be taken orally

02 CSF INJECTIONS

Drugs are injected directly into the Cerebrospinal fluid via the spinal cord



INTRAVENOUS (IV) 03

Use of IV-fluids and injections to administer chemotherapy directly into the bloodstream

DISSOLVING FLAKES 04

Dissolving flakes placed directly on the cancerous tumor site, in the patient's body

CHEMOTHERAPY SIDE - EFFECTS

What chemotherapy really does
to the patient?

AFFECTED SYSTEMS?



DIGESTIVE

Damages the tissue of digestive system leading to nausea and decreased appetite



HAIR

The growing cells are affected in chemo, appearing as the symptom of little to total hair loss



IMMUNE

The strain of chemotherapy takes a great toll on the patient's immune system

AFFECTED SYSTEMS?



LYMPHATIC

Damages the tissue of digestive system leading to nausea and decreased appetite



BONE MARROW

The growing cells are affected in chemo, appearing as the symptom of little to total hair loss



RBCs

The strain of chemotherapy takes a great toll on the patient's immune system

SYMPTOMS



FATIGUE

Recurring Cell damage takes a big toll on a person's strength



BRUISING

Low immunity , leads to easy , slow healing bruises .



NAUSEA

Vomiting caused by damage to digestive tissue



HEART ISSUES

Chemotherapy affects more than just cancer cells ,and this can damage heart tissue as well



ANEMIA

Despite being red, Mars is a cold place



HAIR LOSS

Chemo attacks fast-growing cells and thus end up damaging hair growth

SYMPTOMS



NERVE DAMAGE

CSF – injections and cancerous nerves



INFERTILITY

cases where reproductive organs are damaged beyond repair



DIARRHEA

Intestinal damage leads to poor digestion



DECREASED APPETITE

Digestive system is highly affected, and tube-feeding may be required



HEADACHES

A response to the painful toll of chemo

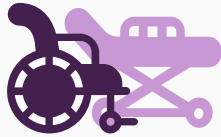


MOUTH & THROAT SORES

Decreased immunity opens the door to infections in bodily orifices

PATIENT CARE

How to help the patient recover during and
after chemotherapy



PROPER REST

Having the patient rest between sessions allows the patient to heal between treatment sessions

increasing the chances of survival for the patient from the strains of chemotherapy



LENGTHY TREATMENT

Chemo treatments are planned out on the course of weeks , months and years.

The process is made slow , so the patient can heal , be stabilized and monitored properly between chemo sessions



NUTRITIOUS DIET

A proper diet is necessary for the patient to recover from damages to the intestines with highly nutritious and immunity boosting food

In extreme cases the patient will have to be fed via tubes and given drips to improve their diet's content



MEDICATIONS

Chemo treatments are severe, and patients often take oral and IV medications to help recover and even keep the treatment going

The medications depending on the case can vary from supplements, hormonal pills, strong painkillers and oral-chemotherapy



CASE STUDY : **XERODERMA PIGMENTOSUM**

10yr old girl , presented with a cancerous tumor infiltrating the nostril wing

[PATIENT ANALYSIS]



PATHOLOGY

This is the number of total
visitors we had last month

ONCOLOGY

This is the number of
patients we had last month

PHYSIOLOGY

This is the number of
transplants performed so far

[HEAMATOLOGICAL AFFECTS SLIDE]



NUETROPENIA

Nuetrophils....

THROMBOCYTOPENIA

Thromobocytes have
issue , low plateletes
..transfusion...

ANEMIA

This was aprto of the
symptoms in prev.
slides

RENAL FAILURE

Something to do w/
lymoh ig....

[USE THIS AS LYMPH CAUSE IDK PHYSIO OF LYMPH LOL]



MARS

Despite being red,
Mars is a cold place



MERCURY

Mercury is the
smallest planet



VENUS

Venus has a
beautiful name



SATURN

Yes, this is the
ringed one

CHEMO & RADIATION ON PRESENTED PATIENT



RADIATION THERAPY

- Administered locally via machines
- It has less extreme pain and fewer symptoms.
- The patient should have good tolerance to Radiation treatment
- Was carried out after suppression of chemotherapy
- Thrombocytopenia was managed via platelet infusions
- This was a 30-40% decrease in tumor mass.

CHEMOTHERAPY

- It caused significant damage, seen in development of thrombocytopenia, anemia and neutropenia
- Alkylating Agents were used, which are Cisplatin and 5-fluorouracil.
- Only 4 cycles before termination
- Patient showed symptoms of degrading haematological health
- Acute renal failure developed
- Loco-regional surgery was intended on good response to remove the tumour



CONCLUSION



















[FWANCY STUFF TO USE IF YOU WANT MA BOIIII]





[EVEN MORE FWANCY STUFF MA BOIIII !!!]

	VENUS	SATURN	JUPITER	MARS
MEASURE 1				
MEASURE 2				
MEASURE 3				
MEASURE 4				

Medical Icons

