



มหาวิทยาลัยราชภัฏนครปฐม
Nakhon Pathom Rajabhat University

Chemotherapy



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Chemotherapy

Chemotherapy is the treatment of cancer using specific chemical agents or drugs that are destructive to malignant cells and tissues.

The term comes from two words that mean "chemical" and "treatment." Cytotoxic literally translated means 'toxic to cells'.

It may be combined with surgery or radiotherapy or both to reduce tumor size pre-operatively.



Modes of Chemotherapy

Inductive Chemotherapy

Adjuvant Chemotherapy

Neo-adjuvant Chemotherapy

Local Chemotherapy



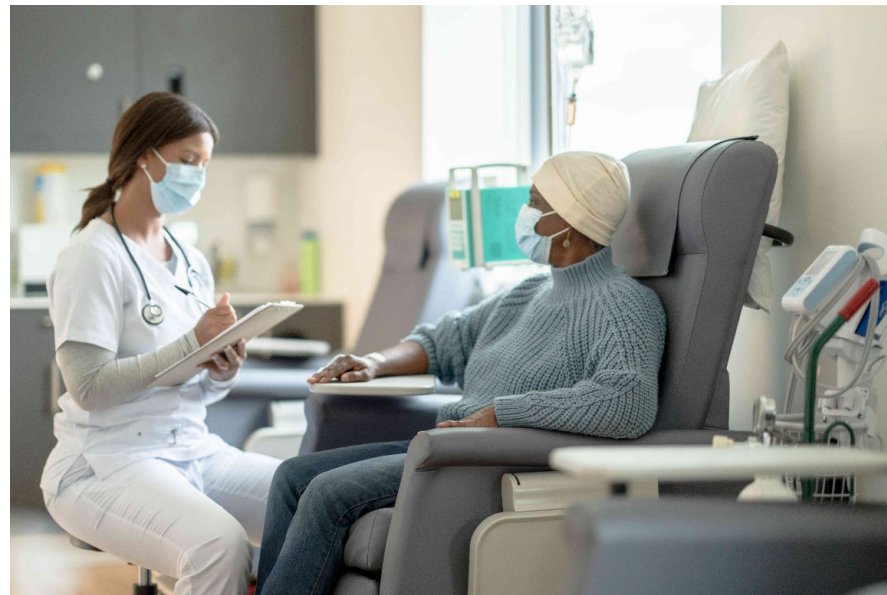
Goals of chemotherapy

Cure

Control

Palliation

Prevention



Side Effects of Chemotherapy



1

Infection



2

Oral Hygiene



3

Nausea and
Vomiting



4

Loss of Appetite



5

Change of Taste



6

Sore Mouth and
Throat



7

Constipation



8

Diarrhoea



9

Hair Loss (Alopecia)



10

Fatigue



11

Infertility and Sex



12

Peripheral
Neuropathy

Side effects of chemotherapy

Tumor lysis syndrome

Hematopoietic effect

GI effects

Hepatic effect

Renal Effects

Integumentary effects

Reproductive effects

Neurological effects



Nursing Management

Imbalanced nutrition less than body requirement related to disease process and treatment.

Impaired tissue integrity related to cancer treatment

Disturbed body image and situational low self esteem related to changes in appearance ,roles and function

Risk for infection related to altered immunological response

Risk for injury related to side effects secondary to chemotherapy



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Radiation Therapy



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Radiation Therapy

RT uses high energy radiation such as X-ray or gamma rays to destroy cancer cells and stop them from growing and multiplying.

It is the method of cure for certain localized cancer.

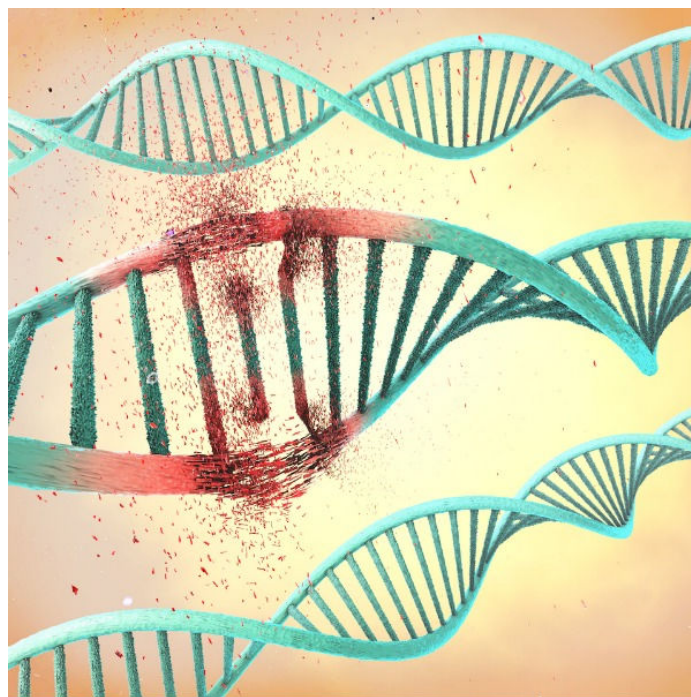
Radiation is used alone in cases where a tumor is unsuitable for surgery. More often it is used for conjunction with surgery and chemotherapy.



<https://www.saltwire.com/atlantic-canada/news/radiation-unit-reopened-at-health-sciences-centre-100931556/>

Mode of action

Radiation destroys a cell's ability to reproduce by damaging its DNA, delaying mitosis to repair DNA or inducing apoptosis.

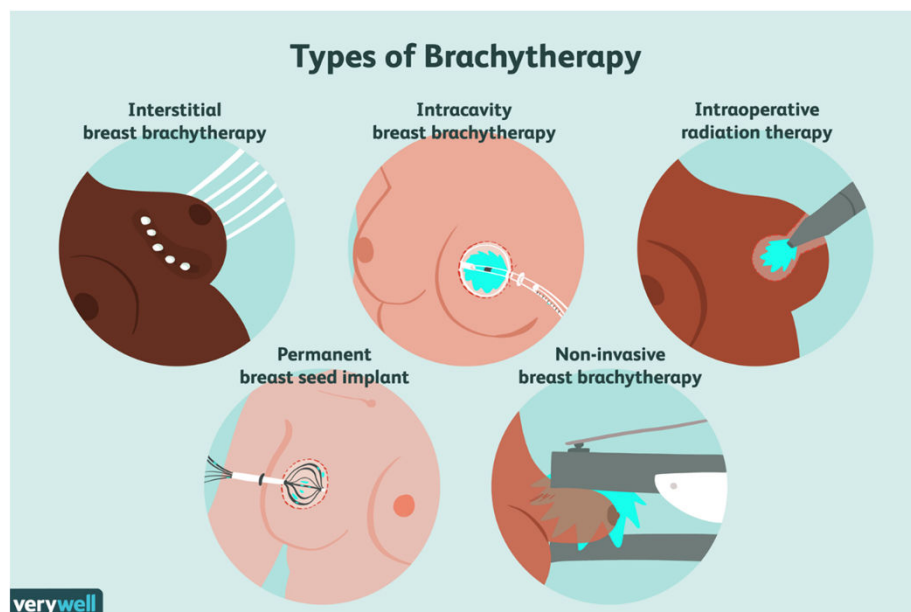


Types

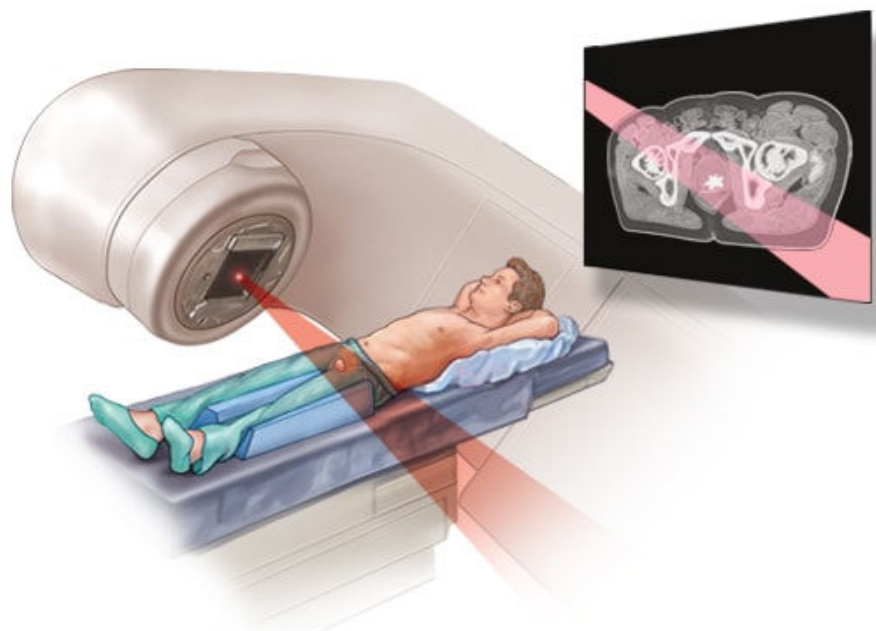
Teletherapy (External Beam Radiation Therapy)



Brachytherapy (Internal Radiation Therapy)



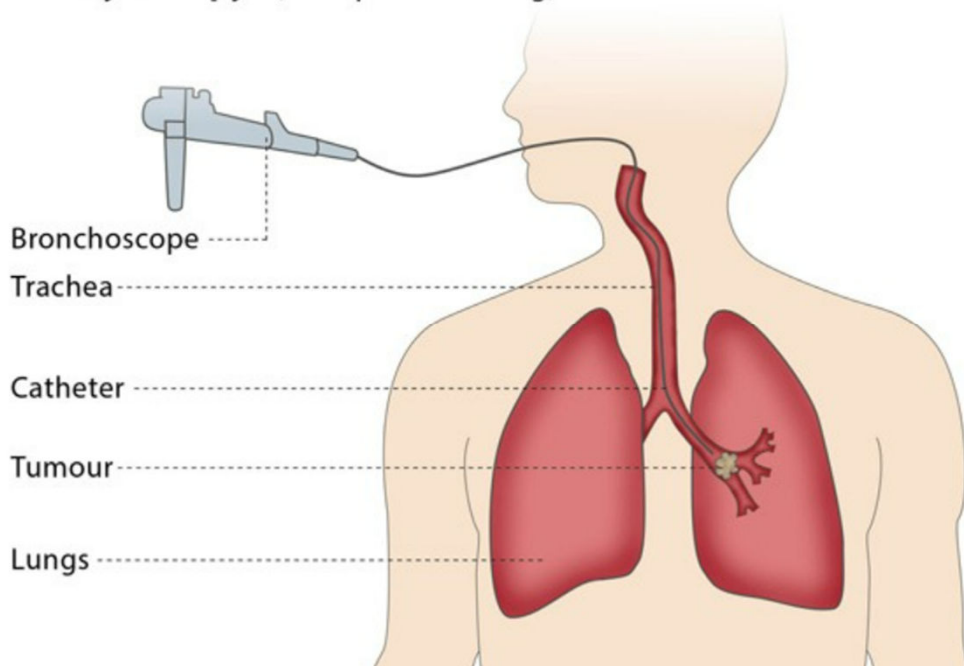
Teletherapy (External Beam Radiation Therapy)



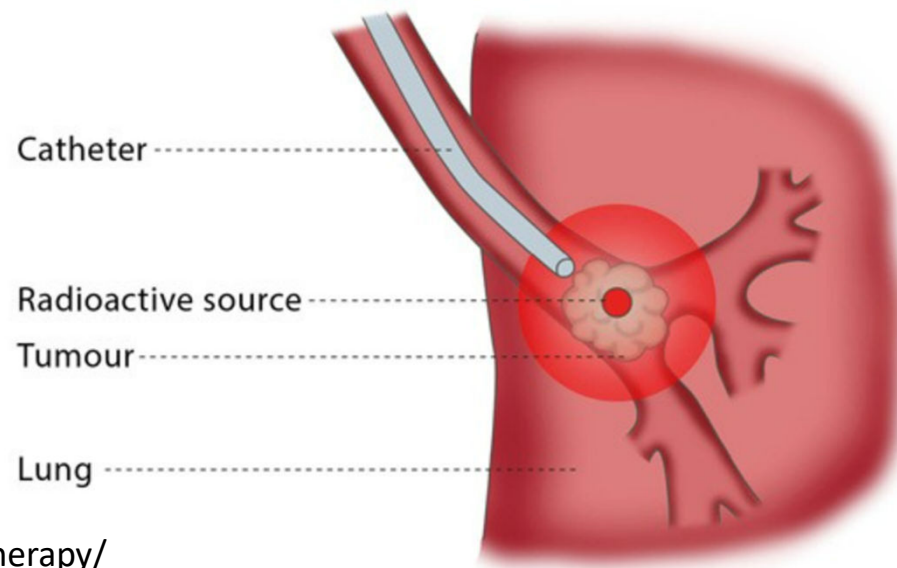
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Brachytherapy (Internal Radiation Therapy)

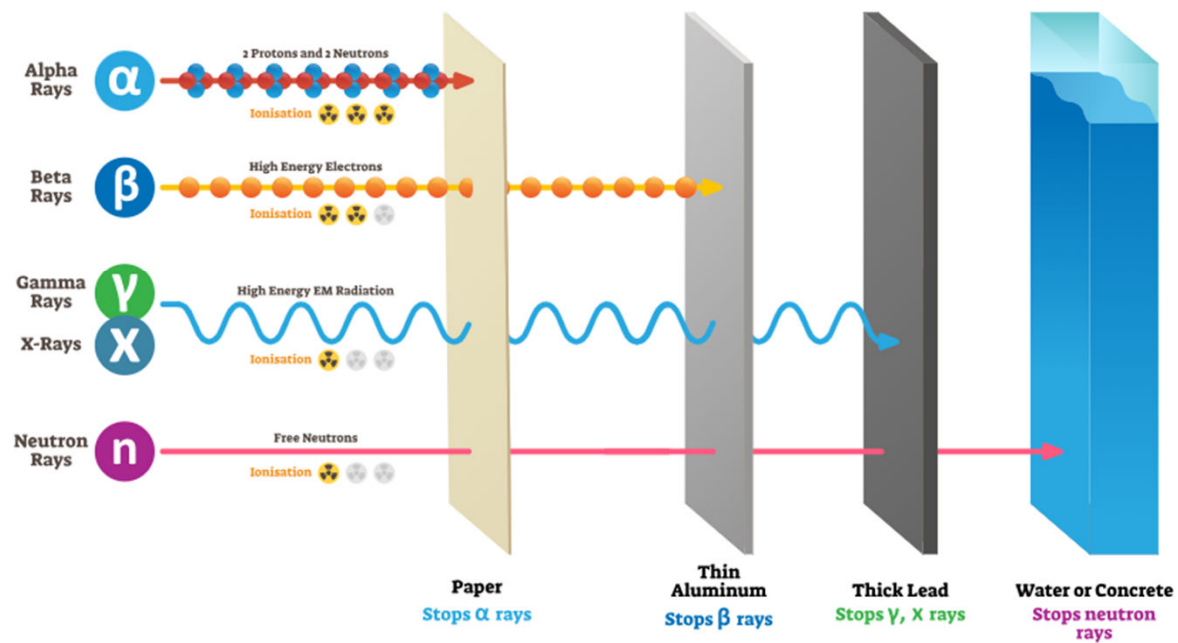
Brachytherapy (example in the lung)



Brachytherapy (example in the lung)



TYPES OF RADIATION



<https://www.ans.org/nuclear/radiation/>

Side effects of RT

In general, skin reactions from mild erythema to moist desquamation and fatigue may occur after radiation therapy.

Side effects like skin tenderness are generally limited to the area receiving radiation.

Radiation doesn't usually cause hair loss and nausea like chemotherapy

Side effects begin during the 2nd and 3'd week of treatment and may last for several weeks after final treatment.

Side effects also depends on the site of the radiation such as radiation for head and neck cause, dry mouth, dental problems, mucositis.

Radiation at pelvic area causes cystic, diarrhea and constipation

Side effects of RT

Some Common Side effects of radiation therapy are:

Fatigue

The skin becomes red ,dry ,itchy and color change.

Alopecia

Anorexia

Some patients may experience Nausea and vomiting



Nursing care for patients with radiation therapy



- ❖ Answer the queries and allay the fear of patient and family about the effects of radiation on other parts.
- ❖ Explain about procedure of radiation therapy e.g. it is painless, duration of treatment, importance of taking nutritious diet including plenty of fluids and avoid alcohol, tobacco strictly.
- ❖ Patient may resume sexual activities if he or she is comfortable

Nursing care for patients with radiation therapy

- ☺ Assess patients skin and oropharyngeal mucosa and maintain personal hygiene and good oral care.
- ☺ **Assess the nutritional status well**
- ☺ Protect the treatment area form sunlight
- ☺ **Advice not to rub, scrub on treated skin area**
- ☺ Advice to wear soft, cotton clothes
- ☺ **Don't apply very hot or cold on the treatment area and avoid cosmetics**
- ☺ Advice to take frequent small meals

Nursing care for patients with radiation therapy

- ★ Watch for the side effects and manage each effect properly
- ★ Check the blood count
- ★ Stop the radiation if he/she has complained diarrhea, fever or abnormal report.
- ★ Proper recording and reporting.



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thank you