มหาวิทยาลัยราชภัฏนครปฐม
Nakhon Pathom Rajabhat University

Cancer and nursing management

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Outline

- Oncology concept
- Chemotherapy
- Radiation
- CA breast
- Palliative care

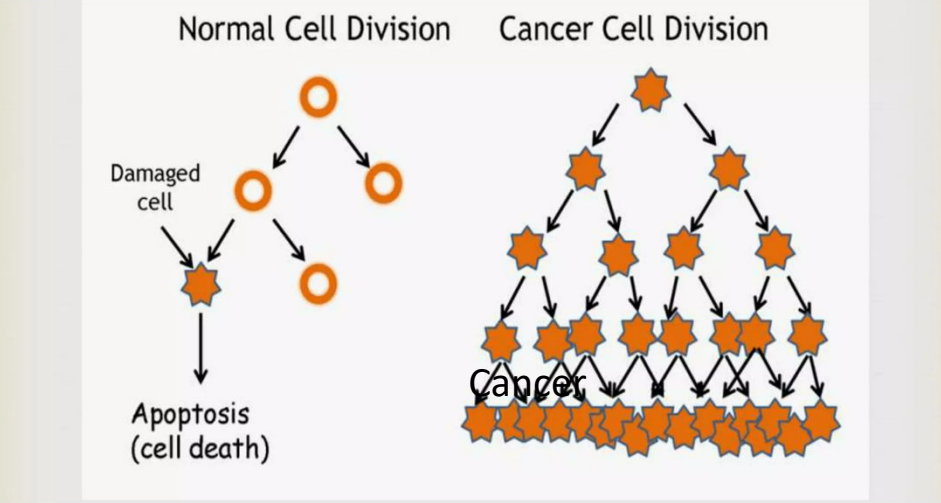
Oncology concept

Definition

Oncology: The branch of medical science dealing with tumors including the origin, development, diagnosis and treatment of benign and malignant tumors.

Oncology is the branch of science that deals with the study of cancer

Cancer



Cancer is a group of neoplastic diseases in which there is a transformation of normal body cells into malignant ones.

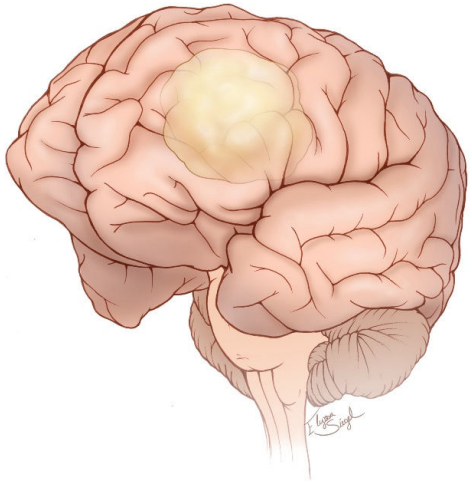
OR

Uncontrolled and rapid growth of abnormal cells in human body and its invasion to adjoining parts of the body which may also spread to other distant organ from original site is called Metastasis.

https://savanacanary.weebly.com/unit-3.html

Tumor

A tumor, also known as neoplasm is an abnormal mass of tissue which may be solid or fluid- filled that can be either benign (non-cancerous) or malignant (cancerous).

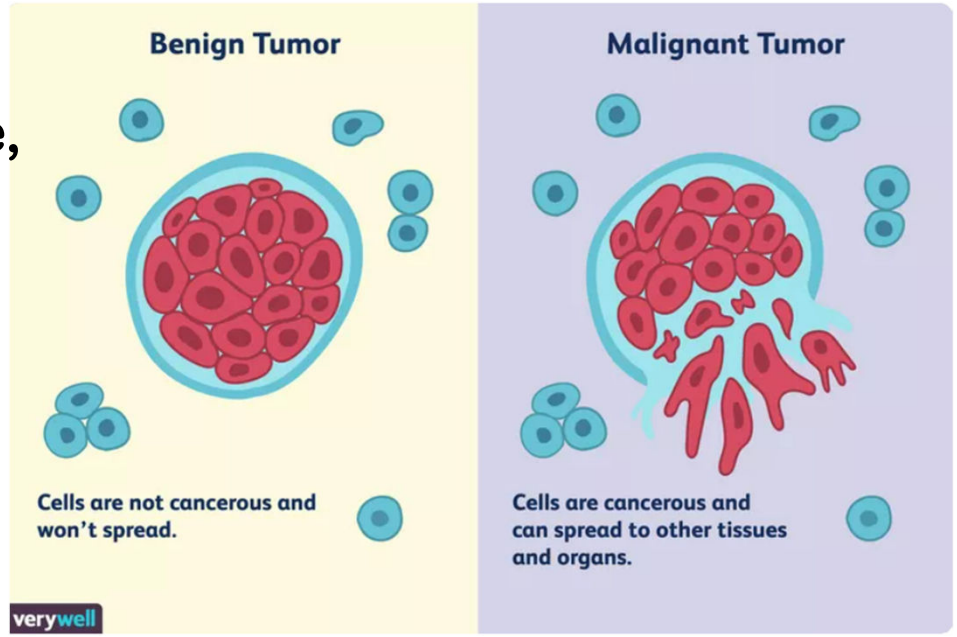


Benign Tumors aren't cancerous and can often be removed. In most of the cases they don't possess any health risk and don't come back.

Malignant Tumor are cancerous, they can invade nearby tissues and spread to other parts of the body.

Benign

Slow growing,
capsulated,
Non Invasive
do not metastasize,
well differentiated,
suffix oma eg.
Fibroma.

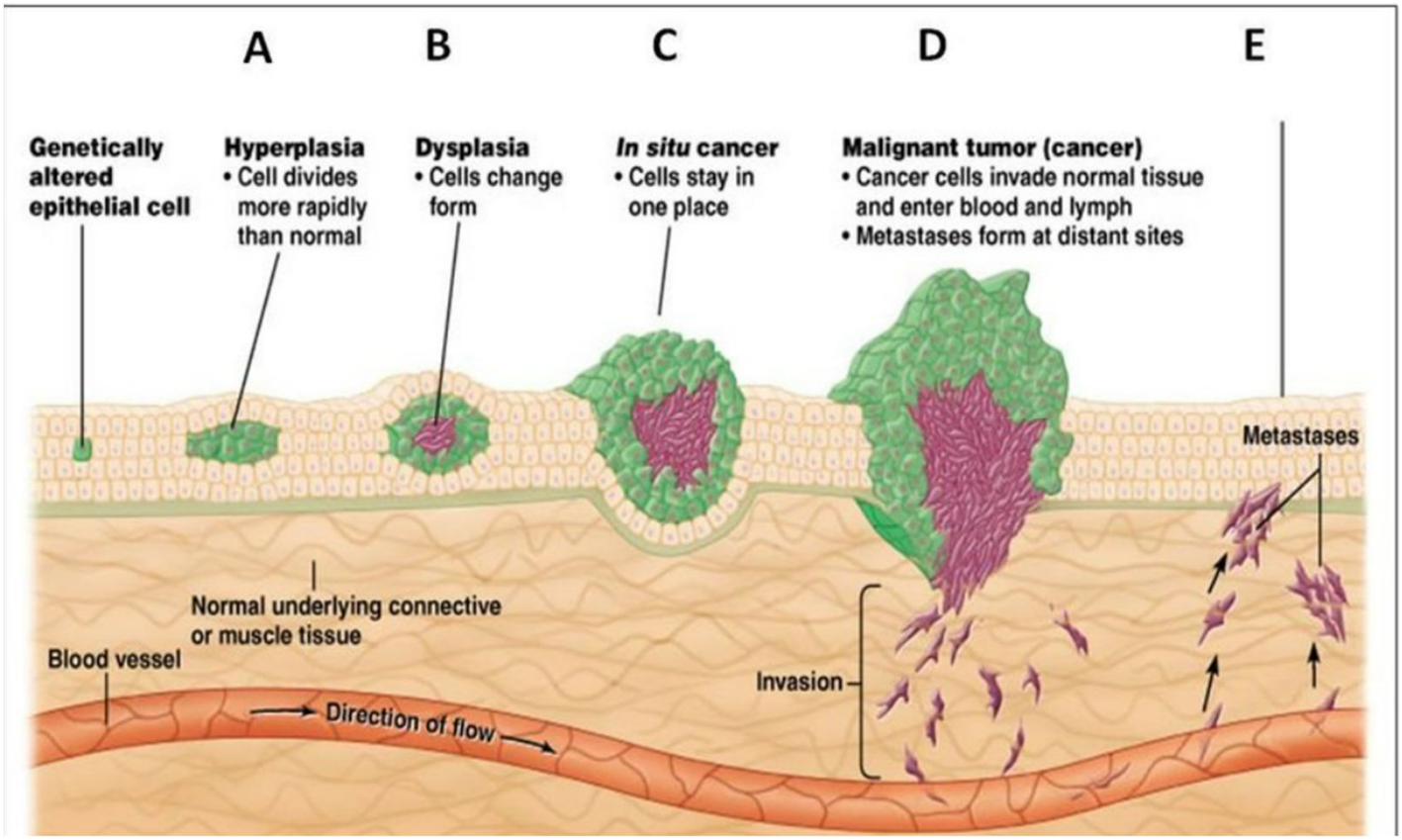


Malignant

Fast growing.
non capsulated,
Invasive & Infiltrate
Metastasize.
poorly
differentiated,
Suffix "Carcinoma
"Sarcoma"

https://www.verywellhealth.com/what-does-malignant-and-benign-mean-514240

Stages of tumor development and mechanism of metastasis



https://www.researchgate.net/figure/Stages-of-tumor-development-and-mechanism-of-metastasis_fig2_278644130

Carcinogens

carcinogen is something that can cause cancer. Examples includes cancer causing chemicals, viruses and environmental exposures.

Physical carcinogens: UV rays and ionizing radiations

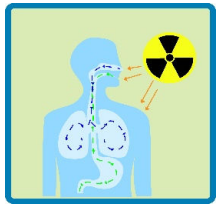
Chemical carcinogens: Asbestos, Tobacco ,Smoke Arsenic

Biological Carcinogens: Infection from micro-organisms

Risk factors of cancer

Cigarette smoking

Infections



Radiation exposures

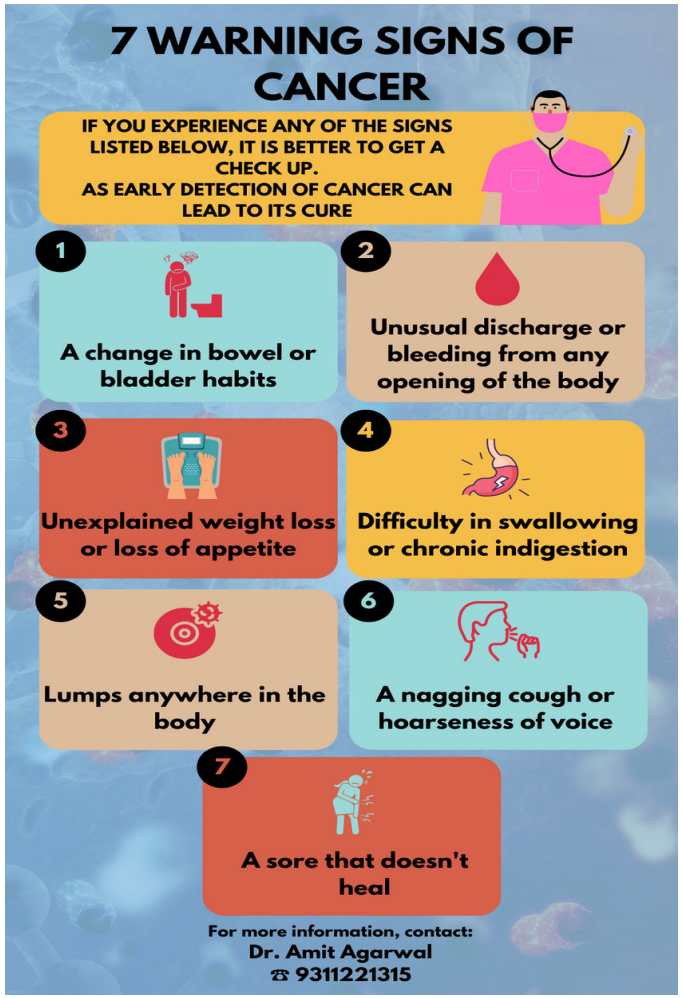
Immunosuppressive medicines

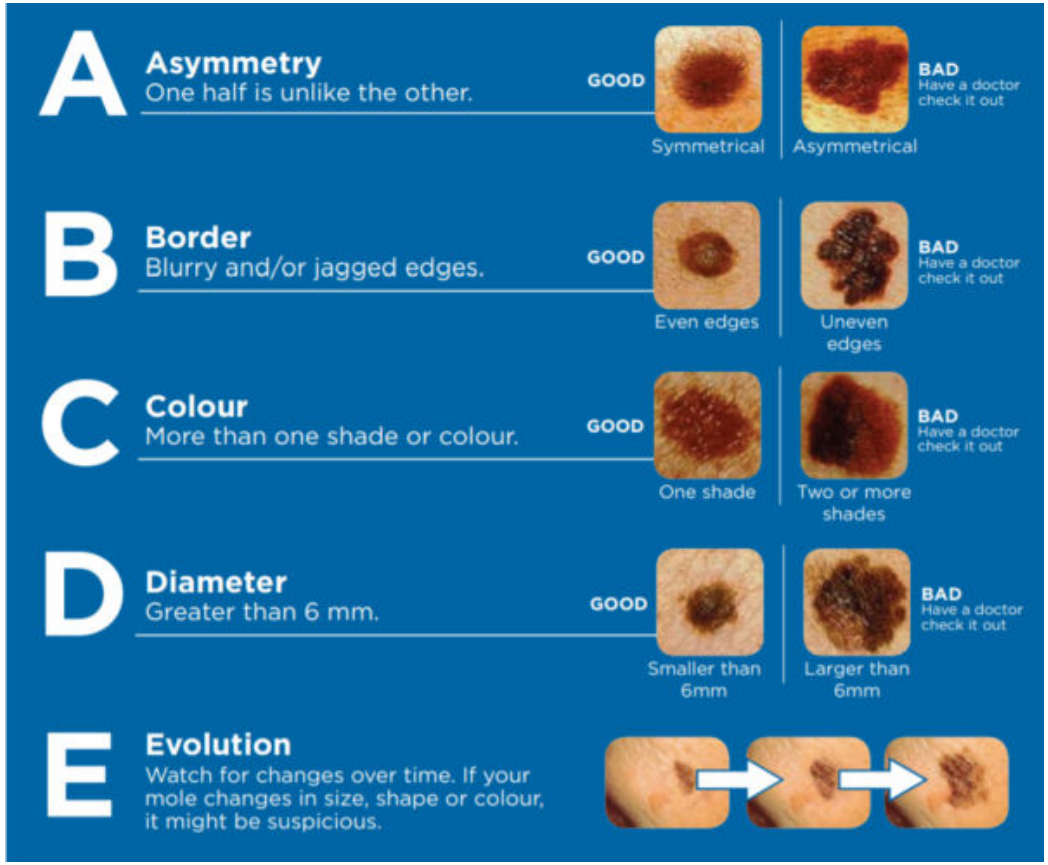
Diet

Alcohol

Obesity

Environmental factors





https://www.canadianskincancerfoundation.com/early-detection/the-abcdes-of-early detection/

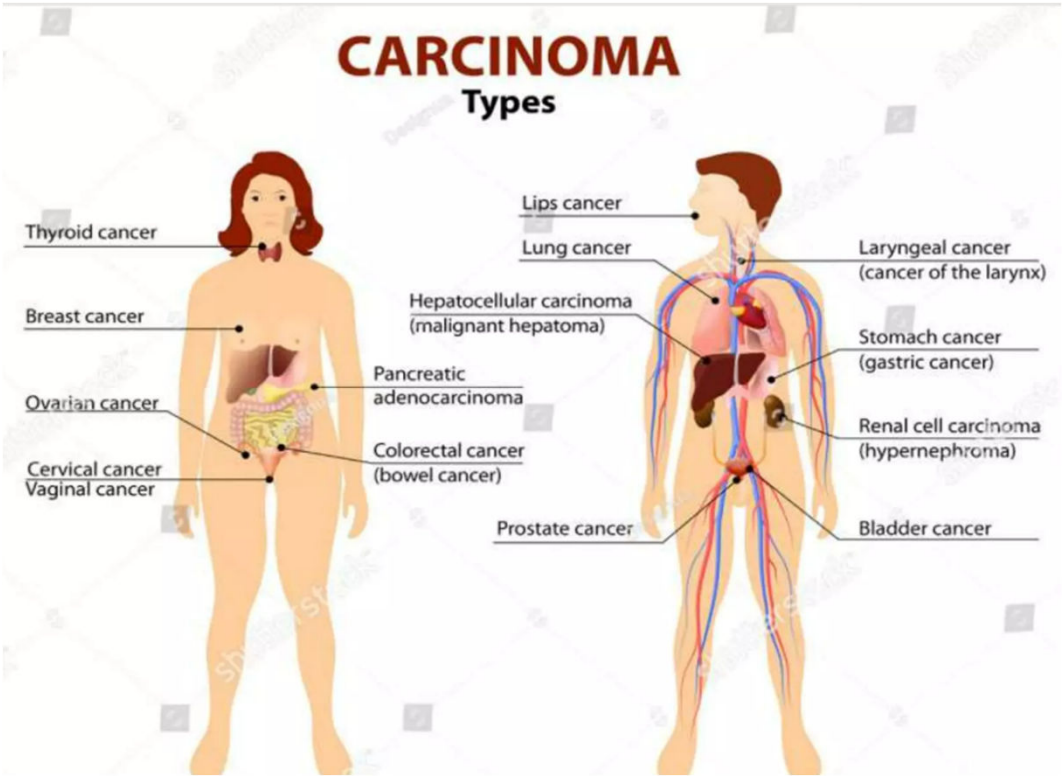
Types Of Cancer

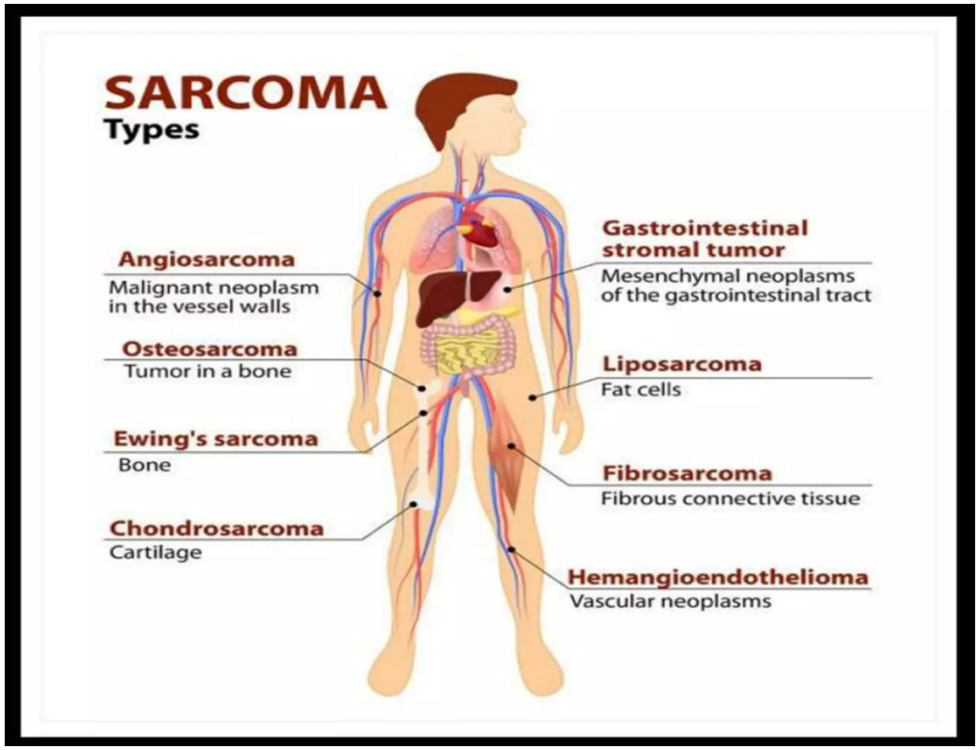
❖It is divided according to boarder categories

❖ Carcinoma: cancer that begins in the skin or in tissues that line or cover internal organs (epithelial tissues)
(epithelial cells are found in breast, skin, cervix, stomach prostate)

❖ Sarcoma: cancer that begins in bone, cartilage, fat, muscle, blood vessels or other connective tissues.

❖ Leukemia: cancer that starts in blood forming tissues such as the bone marrow and causes large numbers of abnormal blood cells to be produced and enter the blood.





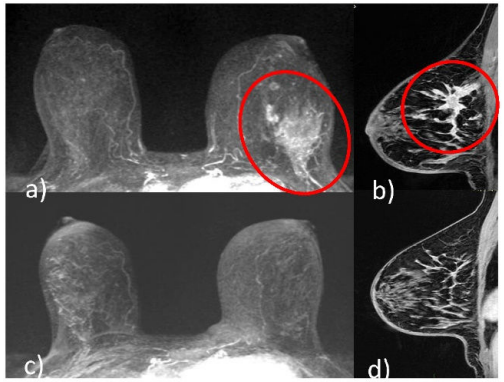
https://www.shutterstock.com/th/image-vector/carcinoma-type-cancer-woman-man-silhouette-371500852

Cancer Prevention

Level of Prevention	Tools	Objective
Primary	Removal/ reduction of risk factors	Avoiding onset of disease
Secondary	Early detection/ Screening/ Biopsy/Exfoliative cytology	Improving prognosis
Tertiary	Treatment of existing lesions	Curing Preventing death

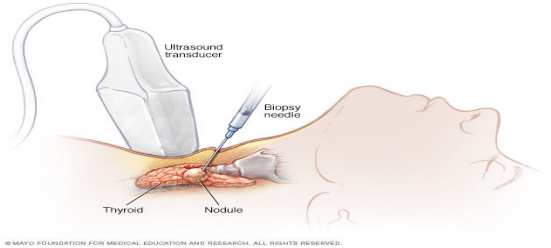
Different diagnostic procedures for cancer

It may include tumors markers identifications, imaging studies, mammography, MRI,CT ,USG , endoscopy, smear, biopsy, nuclear medicine imaging.



Biopsy

A cancer may be suspected of various reasons, but the definitive diagnosis of most malignancies must be confirmed by histological examination of the cancerous cells by a pathologist. Tissue can be obtained from a biopsy or surgery.



It means removal of small pieces of living tissue from an organ or a part of body for microscopic examination for the diagnostic purpose of benign, malignant other tumor.

Patient preparation

Before Procedure:

Explain the procedure
Collect all preoperative report blood grouping, complete blood count, bleeding time, clotting time consent
Assess vitals
Ready the biopsy set and assist if necessary
Gowning the patient and position maintain.
Expose the area of biopsy

Patient preparation

After procedure:

Assess the vital sign

Positioning the patient

Label the sample correctly

Explain about the medication, follow-up and report

dressing and suture removal.

Proper dispatch the sample to the library

Recording and reporting.


Thank
you