

DIAGNOSIS, TREATMENT, AND NURSING MANAGEMENT OF CANCER

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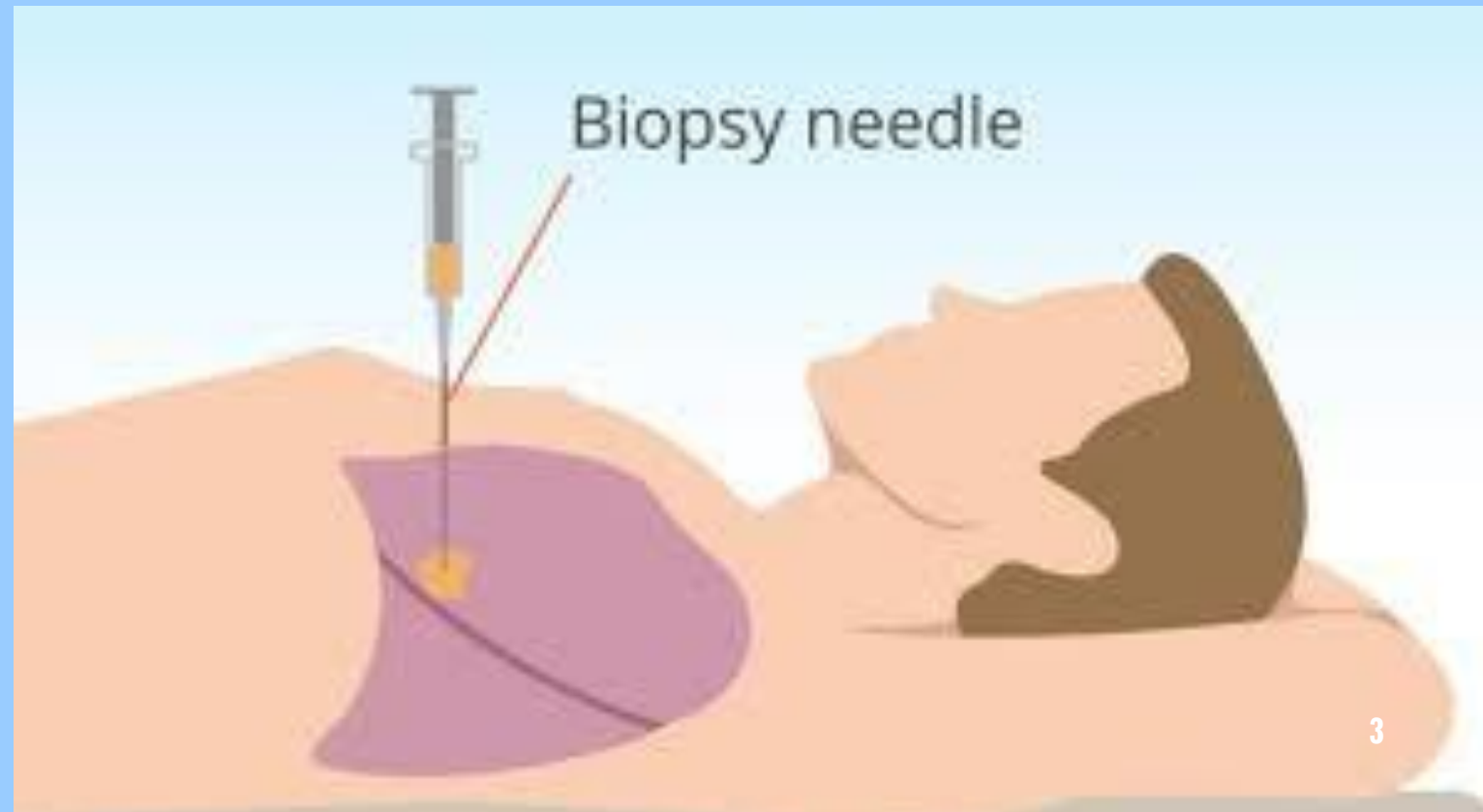
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Diagnosis:

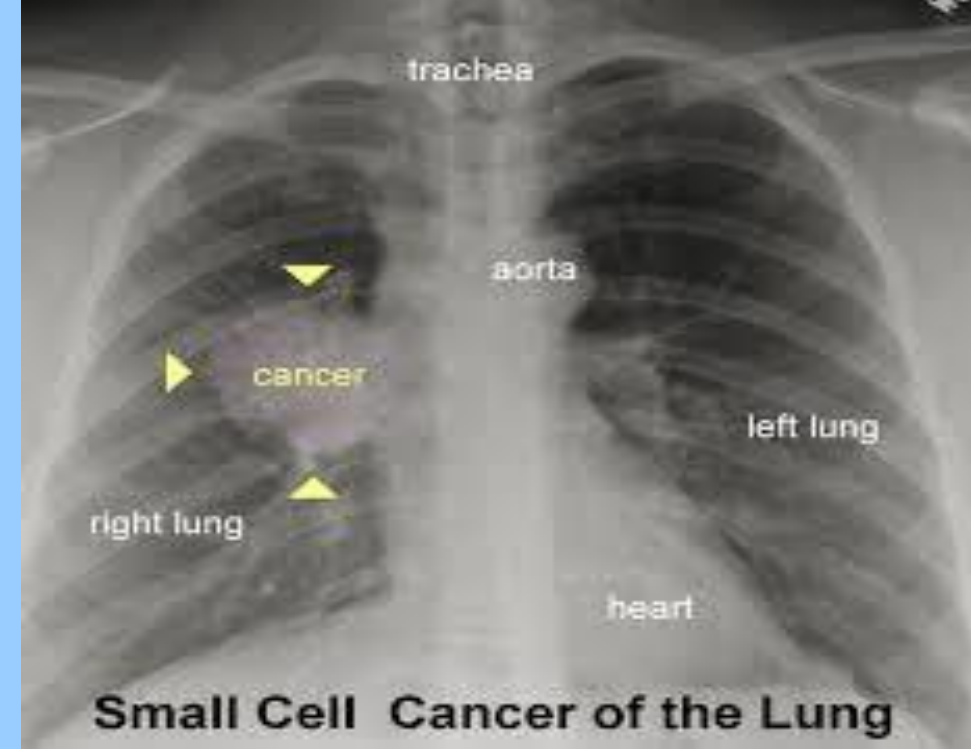
- A physical exam
- Patient history (current, medical, surgical, family)

Biopsy

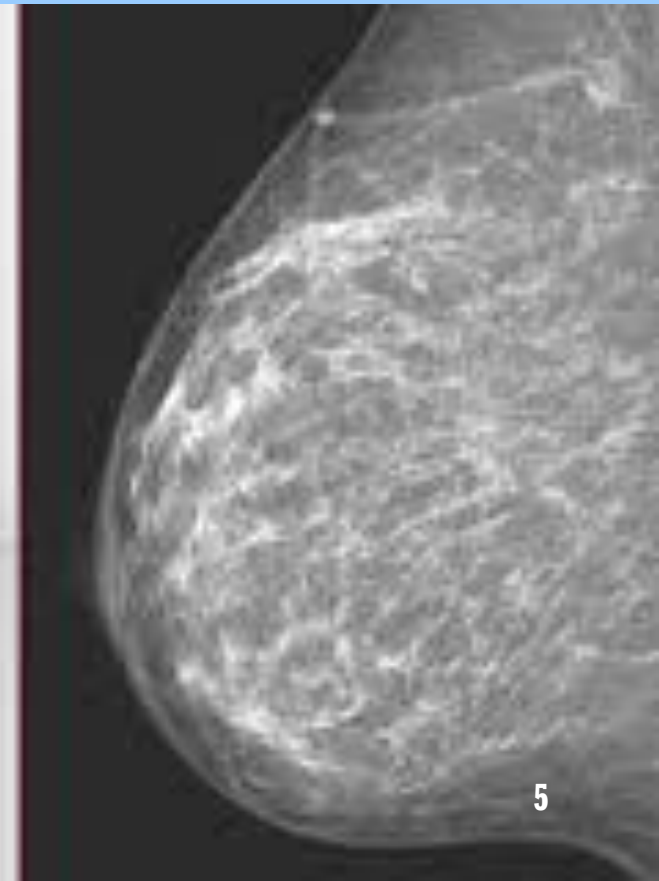


Radiology:

- X-ray



Mammography



- **Contrast media x-ray**

(barium)

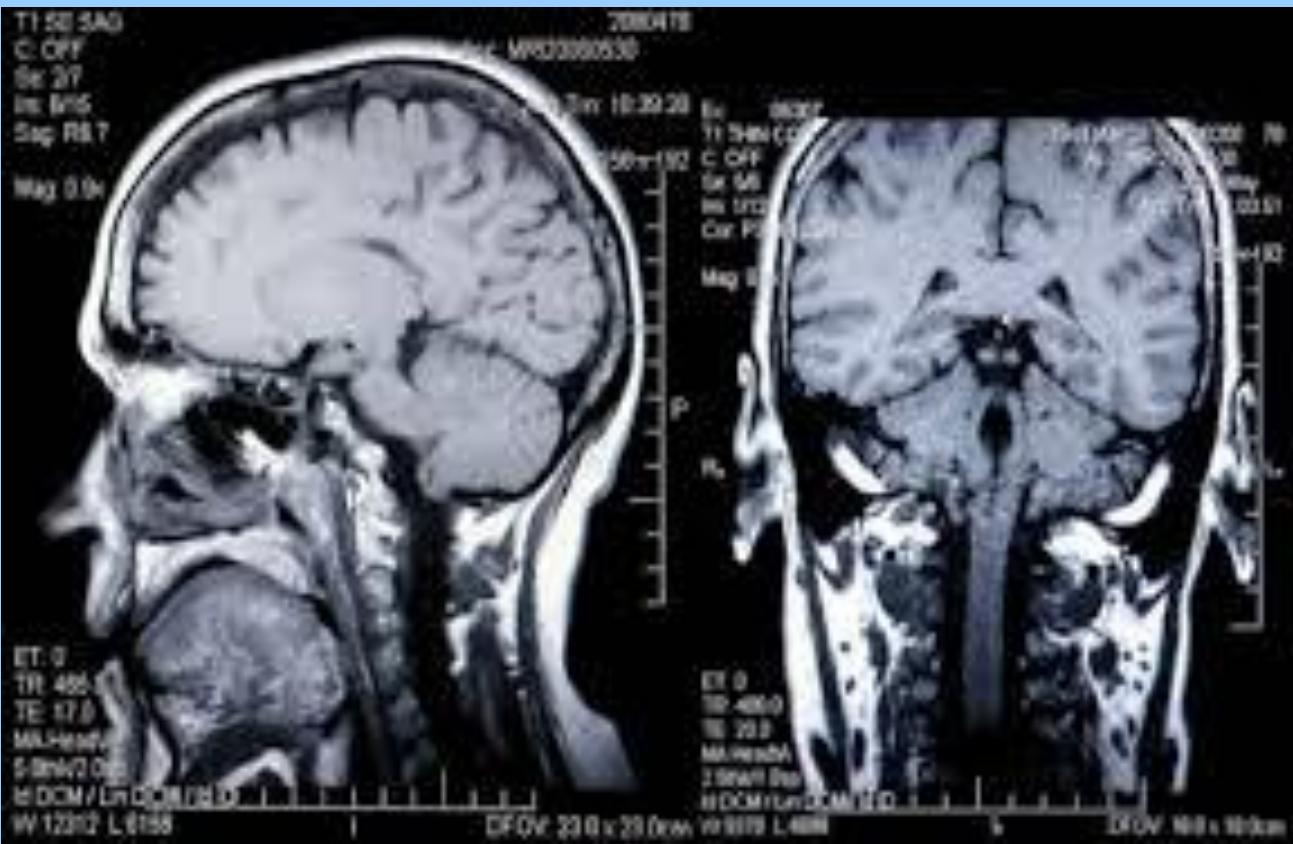


CT (Computed Tomography)



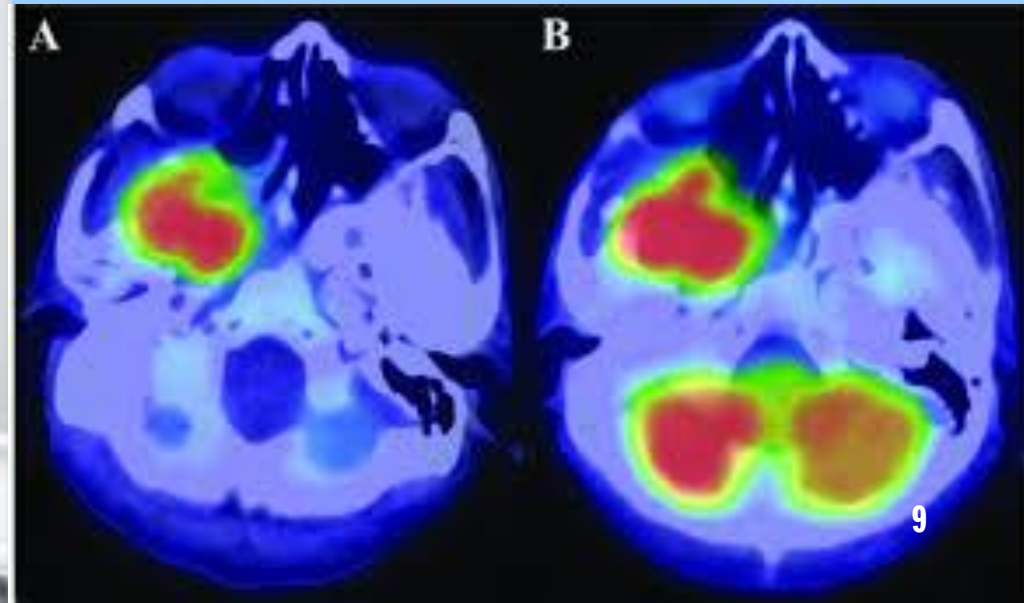
MRI

(Magnetic Resonance Imaging)



PET

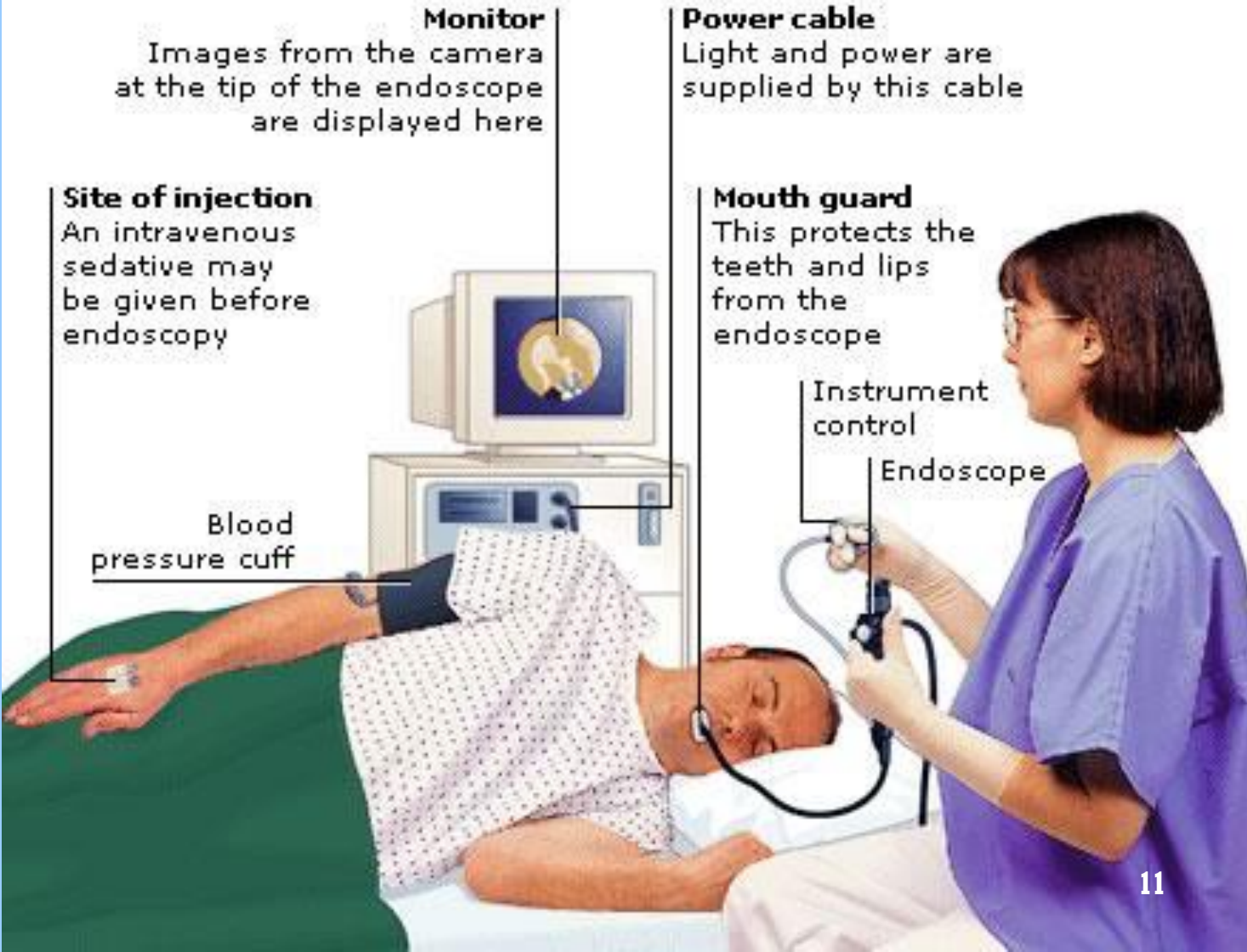
(Positron Emission Tomography)



Ultrasonography



Endoscopy



Laboratory Tests

Examples:

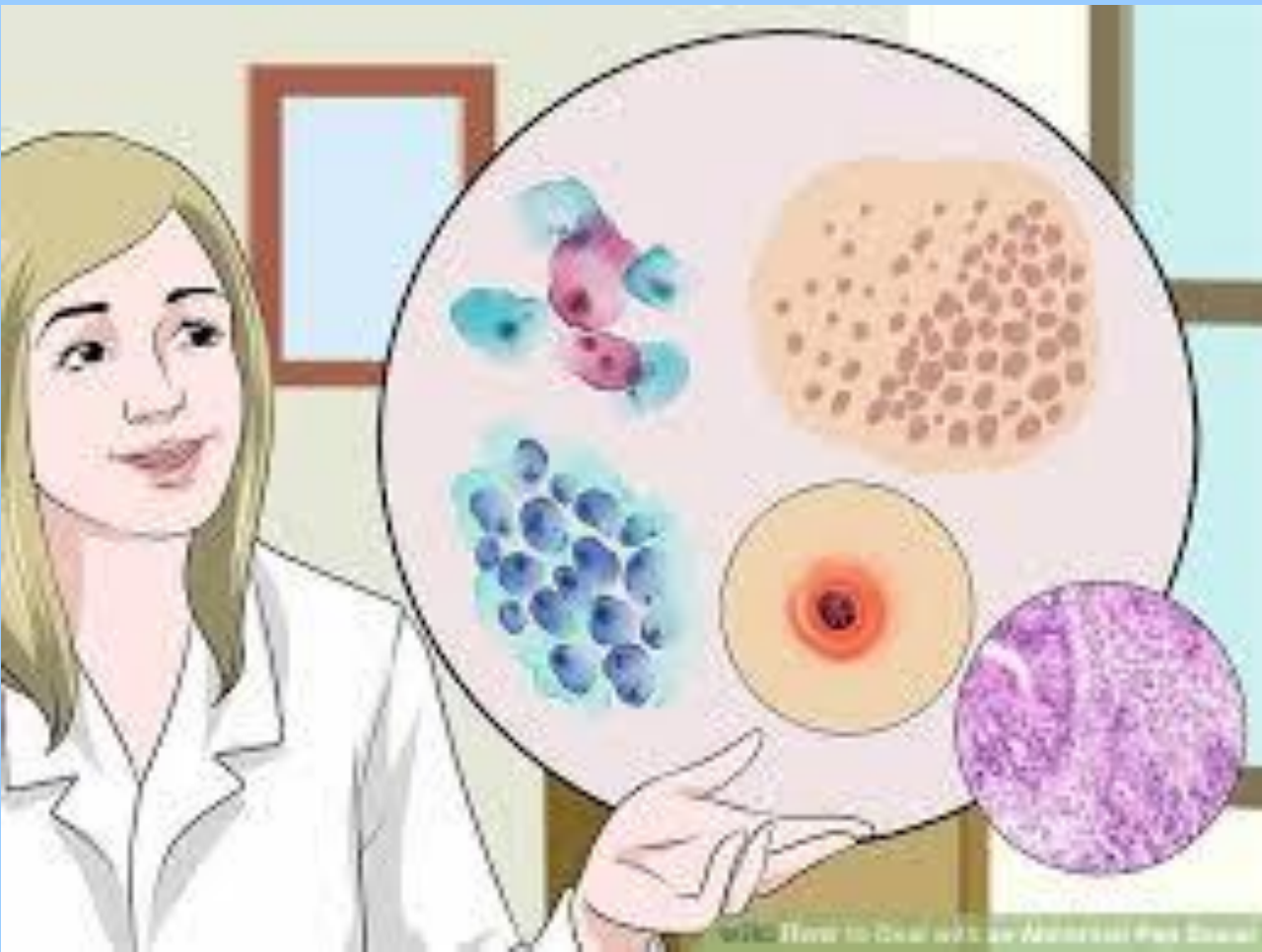
Increase in WBC without infection —————> Leukemia

Increase in bilirubin, alkaline phosphatase, and
glutamic-oxaloacetic transaminase —————> Liver cancer

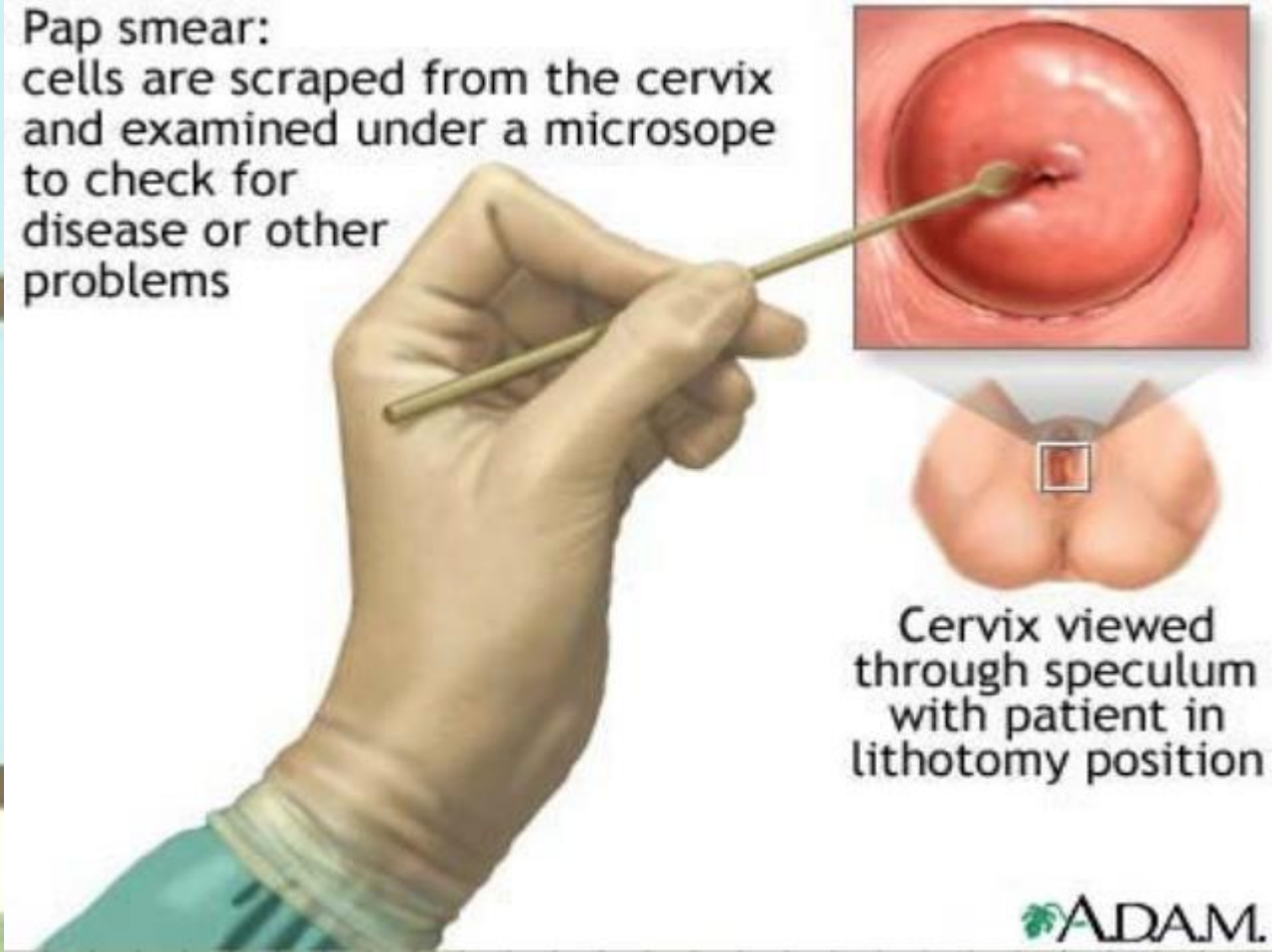
Bone marrow aspiration



Cytology



Pap smear:
cells are scraped from the cervix
and examined under a microscope
to check for
disease or other
problems



Cervix viewed
through speculum
with patient in
lithotomy position

Remember

The different mentioned diagnostic test may not be applicable for ALL type of cancer. Most of them are specific.



TUMOR-NODE-METASTASIS; SYSTEM FOR CANCER STAGING

▪ **Primary Tumor (T)**

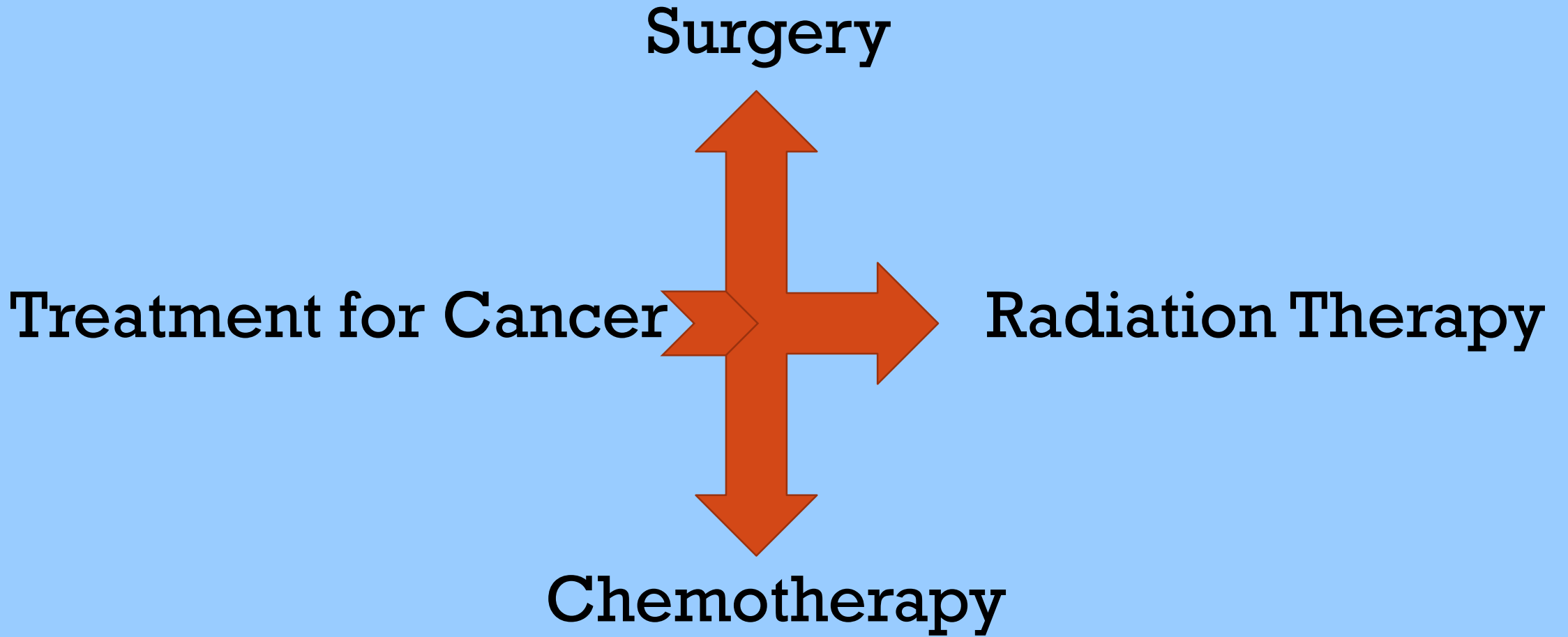
- TX Primary tumor cannot be evaluated
- T0 No evidence of primary tumor
- Tis Carcinoma in situ (early cancer that has not spread to neighboring tissue)
- T1, T2, T3, T4 Size and/or extent of the primary tumor

▪ **Regional Lymph Nodes (N)**

- NX Regional lymph nodes cannot be evaluated
- N0 No regional lymph node involvement
- N1, N2, N3 Involvement of regional lymph nodes (number and location of lymph nodes)

▪ **Distant Metastasis (M)**

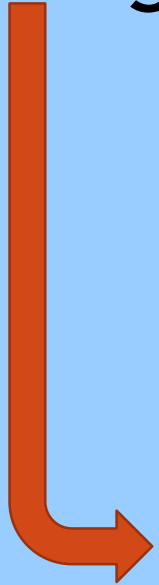
- MX Distant metastasis cannot be evaluated
- M0 No distant metastasis
- M1 Distant metastasis



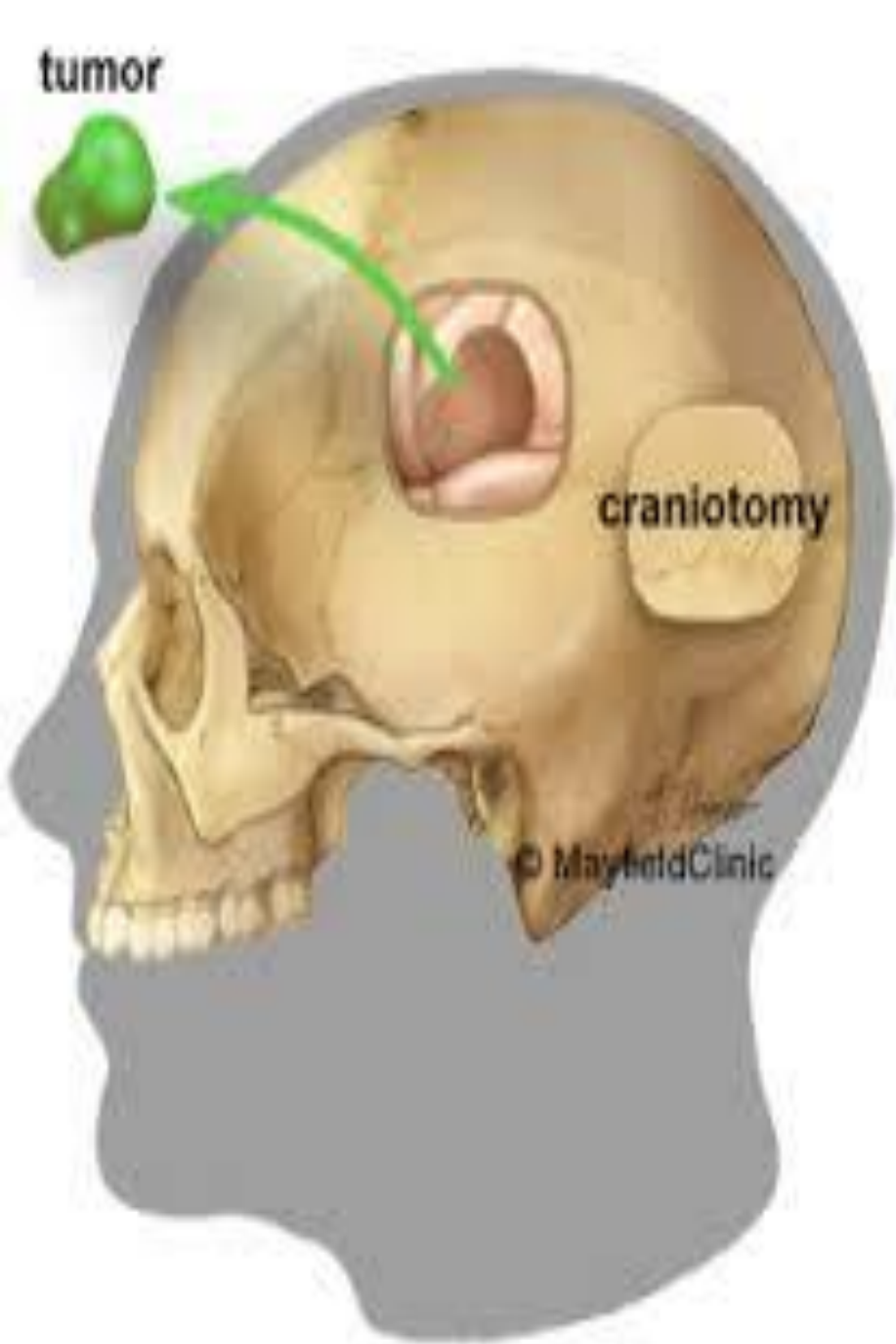
Surgery



Without additional interventions



Followed by radiation or chemotherapy



Radiation

Radiation is used commonly in cancer control and palliation.

It can be curative if the disease is localized.

It can be internal or external.



Radiation can be done

before the surgery (decrease tumor size)

or

after surgery (adjuvant treatment).



Complication of Radiation Therapy

- Fatigue
- Nausea, vomiting, and anorexia
- Mucositis
- Xerostomia
- Skin reactions
- Bone marrow depression

Chemotherapy

Cytotoxic drugs are used for cure, control, or palliation, which work systemic.

Routes

Oral

IV

Side Effects

Toxicities affect all rapidly growing cells:

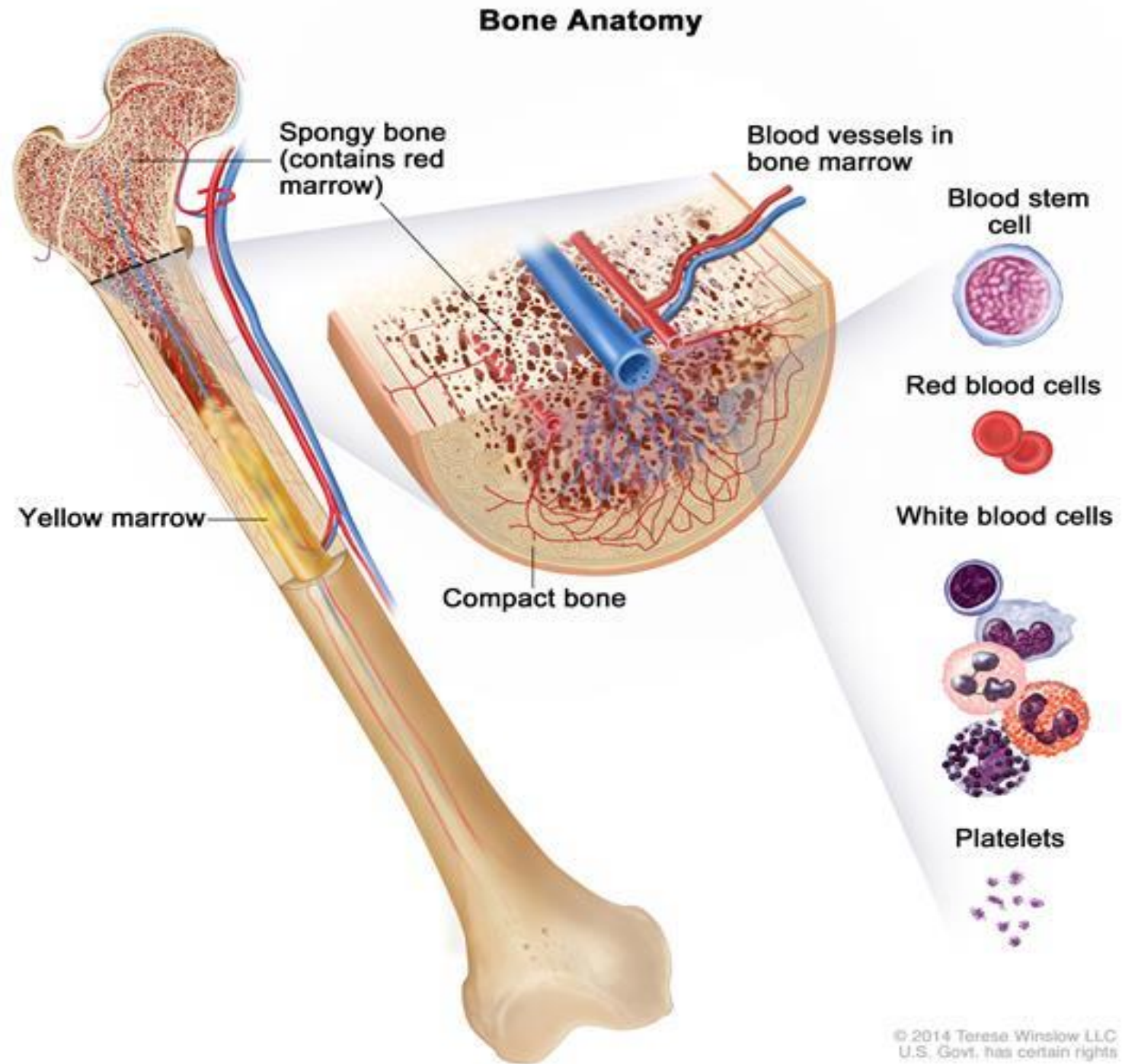
hair,

blood,

skin,

and GI tract.

Chemotherapy side effects on hematologic system



Leukopenia



Thrombocytopenia



Erythrocytopenia



Chemotherapy side effects on gastrointestinal system

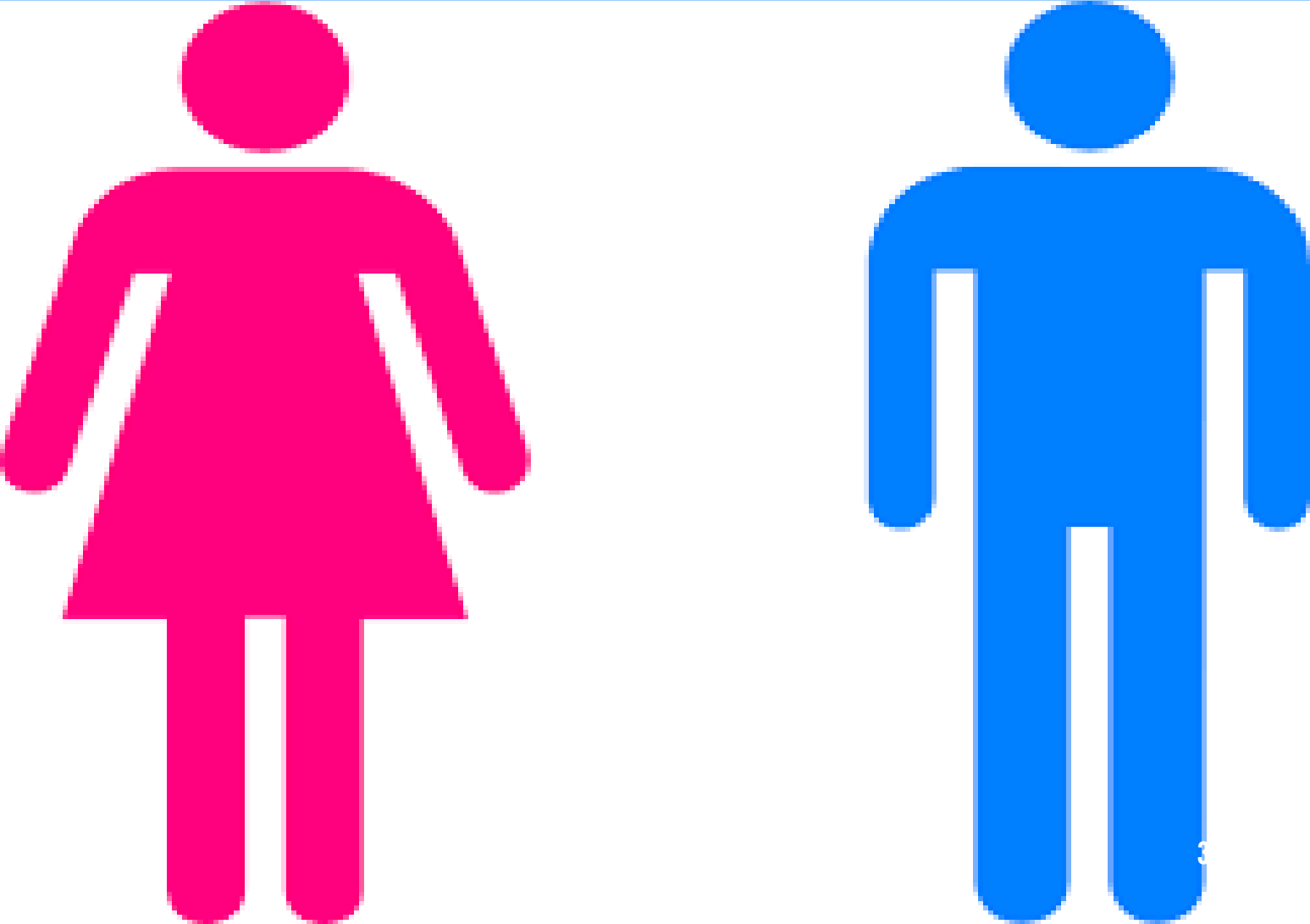


Chemotherapy effects on hair

Alopecia



Chemotherapy effects on reproductive system



Chemotherapy effects on neurologic system



Nursing care for patients with cancer based on:

The disease

The side effects of the treatment

Some problems that need to be considered in nursing care for patients with cancer:

Pain

Immune deficiency

Bleeding tendency

Hyperthermia

Anxiety & Depression

GIT problems

Alopecia

See page 367-376 in Smeltzer, S., Bare, B., Hinkle, J., & Cheever, K. (2010). Textbook of medical surgical nursing Brunner and suddarth. *China.: Lippiniccott Williams and Wilkins*

Extravasation



Treatment of extravasation

Depends on the type of the drug:

Stop the administration

Cold compress

Hot compress

Anti-inflammatory drugs (e.g. dexamethasone ointment)

**At the end, I would say:
cancer is a disease that can be worse than it is
without nursing care!**



References

Williams, L. S., & Hopper, P. D. (2015).
Understanding medical surgical nursing. FA
Davis. [Chapter 11, Page 171-201]

2- Smeltzer, S., Bare, B., Hinkle, J., & Cheever, K.
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