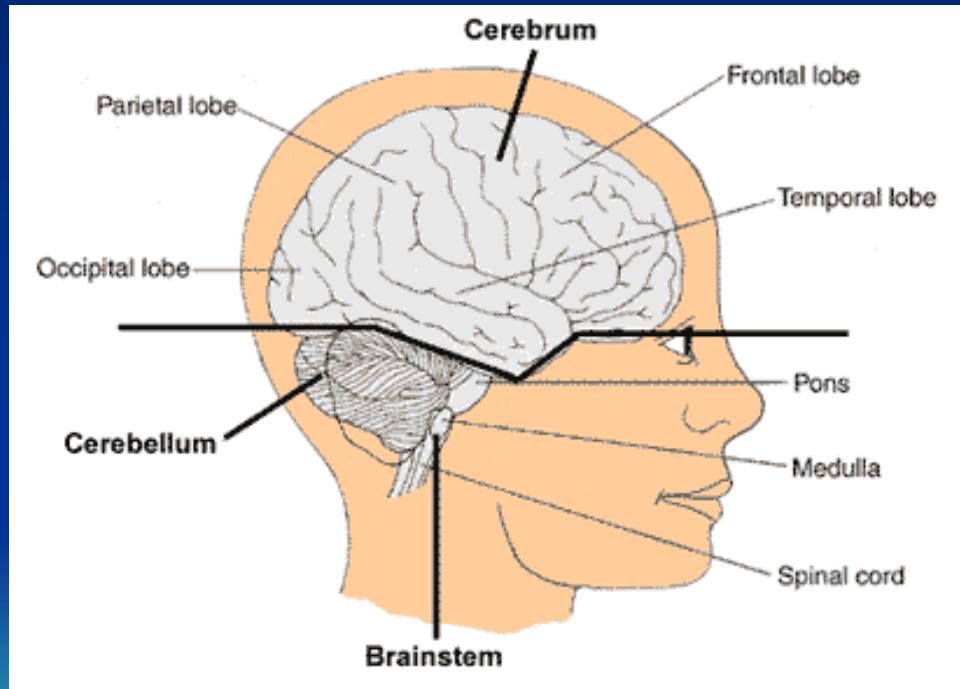


Brain Cancer Colon Cancer

Dr Ibraheem Bashayreh, RN, PhD

Significance

- The brain is the center of thoughts, emotions, memory and speech.
- Brain also control muscle movements and interpretation of sensory information (sight, sound, touch, taste, pain etc)



Background

- Estimated 18,400 primary malignant brain tumors will be diagnosed in 2004 –10,540 in men & 7,860 in women.
- Approximately 12,690 people will die from these tumors in 2004.
- Accounts for 1.4% of all cancers
- Accounts for 2.4% of all cancer related deaths

- an abnormal growth of cells within the brain or inside the skull which can be cancerous or non-cancerous (benign)
- It is defined as any intracranial tumor created by abnormal and uncontrolled cell division, normally either
 - in the brain itself
 - (neurons, glial cells (astrocytes, oligodendrocytes, ependymal cells), lymphatic tissue, blood vessels),
 - in the cranial nerves (myelin-producing Schwann cells),
 - in the brain envelopes (meninges), skull, pituitary and pineal gland,
 - or metastatic tumors

Brain tumor

Primary (true) brain tumors are commonly located in the

- posterior cranial fossa in children
- anterior 2/3 of the cerebral hemispheres

in adults,

although they can affect any part of the brain.

Risk Factors

- * Most brain cancers happen for reasons unknown, however some small risk factors are
- * Environmental risk factor
 - Smoking
 - Diet
 - Occupation
 - Mobile phone
 - Radiation exposure
 - Exposure to vinyl chloride
- * Immunosuppression -
- * Linked with Genetic abnormalities -

Brain tumor

- Tumors can effect any part of the brain and depending on what part(s) of the brain it affects can have a number of symptoms.
 - Seizures
 - Difficulty with language
 - Mood changes
 - Change of personality
 - Changes in vision, hearing, and sensation.
 - Difficulty with muscle movement
 - Difficulty with coordination control

WHO CLASSIFICATION

Neuroepithelial Tumor	Glioma	Astrocytomas Oligodendrogiomas Ependymoma Choroid Plexus Tumor
	Pineal Tumor	
	Neuronal Tumor	Ganglioglioma Gangliocytoma Neuroblastoma
	Medulloblastoma	
Nerve Sheath Tumor	Vestibular Schwanoma	
Meningeal Tumor	Meningioma	
Pituitary Tumor		
Germ Cell Tumor	Germinoma	
Lymphomas	Teratoma	
Tumor Like Malformation	Craniopharyngioma Epidermoid Tumor Dermoid Tumor Colloid Cyst	
Metastatic Tumor		
Contiguous extension from regional Tumor (Glomus Tumor)		

GLIOMA

- a type of tumor that starts in the brain or spine.
- It is called a glioma because it arises from glial cells
- The most common site of gliomas is the brain
- occurs in adults over 45 years of age
- 90% of all brain tumors are Gliomas

Classification

Classified - by cell type,
- by grade,
- by location.

By cell type

Glial Cells	Glial Tumour
Astrocytes	Astrocytomas
Oligodendrocytes	Oligodendrogliomas
Ependymal cells	Ependymomas
Different types of glia	Mixed gliomas (oligoastrocytomas)

Astrocytoma

- Astrocytes brain cells abnormally dividing causing tumors called astrocytomas.
- Astrocytes are glial cells that help nourish neurons– they help repair damage
- How the astrocytomas are classified
 - How close the cells are together within the tumor
 - How abnormal the cells are
 - How many of the cells are proliferating
 - Whether or not there are blood vessels growing near the tumor
 - Whether or not some of the cancer cells have degenerated or not

Astrocytomas--Treatments

- If tumors have not infiltrated normal brain tissue then surgery can be a cure
- Low-grade Astrocytomas are not curable by surgery. However through surgery as much of the tumor as possible is removed and then the patient usually goes through radiation treatment.

Astrocytomas--Treatment

- High-grade Astrocytomas are not curable by surgery. After surgery has removed as much of the tumor as possible the patient can go through radiation treatment and chemotherapy.
- Most common drug given to these patients after chemotherapy is BCNU (Carmustine)

Oligodendrogliomas

- These tumors start in mutated oligodendrocyte brain cells
- Oligodendrocytes make myelin which help neurons transmit signals through the axons
- These tumors may spread through cerebrospinal fluid pathways but typically do not usually spread to locations outside of the brain or spinal cord.

Oligodendrogliomas--Treatments

- Because these tumors infiltrate normal brain tissue these tumors are not cured through surgery. However removal of part of the tumors can relieve some symptoms and prolong life.
- If the tumor is causing disabilities to the patient after surgery the patient may go through chemotherapy, perhaps followed by radiation treatments.

Ependymomas

- Mutated ependymal cells
- Ependymal cells line the ventricles in the central area of the brain and they line part of the pathway through which the cerebrospinal fluid travels
- These mutated cells may block the cerebrospinal fluid from exiting the ventricles causing the ventricles to enlarge (hydrocephalus)

Ependymomas--Treatments

- These tumors do not usually infiltrate normal brain tissue and are therefore curable through surgery.
- If surgery is unable to completely remove the tumors the patient may try radiation therapy.

Diagnosis

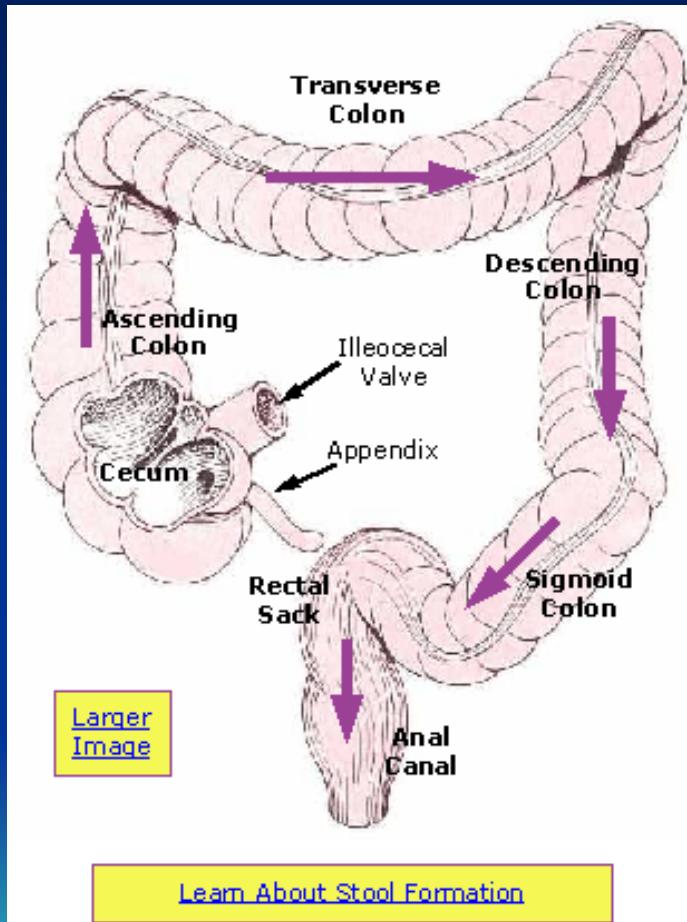
- These tumors can be detected through a MRI, CT scan or a PET scan (Positron emission tomography is a nuclear medicine imaging technique which produces a three-dimensional image or picture of functional processes in the body).
- Once detected, depending on where the tumor is located, a biopsy officially is used to diagnosis cancer.

Prognosis

- For people ages 15-44 five year survival rate is 55%
- For people ages 45-64 five year survival rate is 16%
- For people over 65 five year survival rate is 5%

Colon Cancer

What is the Colon



- The Colon comprises the end of the long, coiled, tubular digestive tract located in the Abdomen
- It basically acts as a waste processor
- Takes digested food in the form of Solid waste pushing it out of the rectum and anus
- The Colorectal tube is a prime location for the development and growth of small polyps or tumors

Colon; The Cancer It's Self

- It starts with a simple cell that mutates and grows into a polyp
- If a polyp is allowed to remain in the colon it can grow into a cancerous tumor that can invade other organs.
- Colon cancer is the second leading cause of cancer deaths



Colon cancer

- Sigmoid colon is the most common site
- Predominantly adenocarcinoma
- If early → 90% survival
- 34 % diagnosed early
- 66% late diagnosis

Colon cancer

- PATHOPHYSIOLOGY
- Benign neoplasm → DNA alteration → malignant transformation → malignant neoplasm → cancer growth and invasion → metastasis (liver)

Colon cancer

□ ASSESSMENT FINDINGS

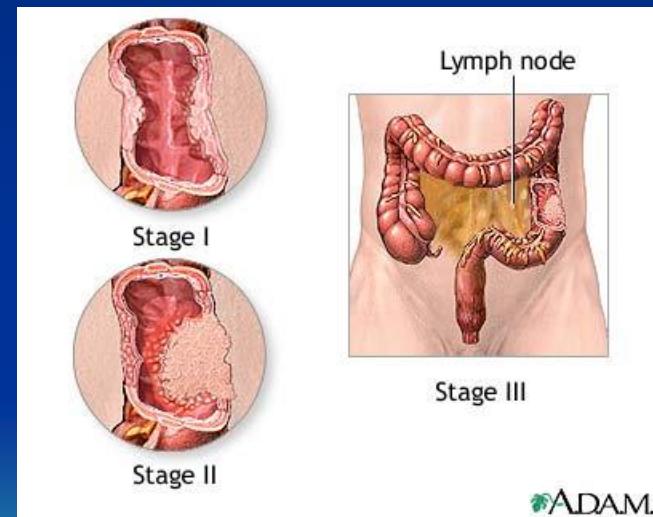
1. **Change in bowel habits- Most common**
- 2. Blood in the stool
- 3. Anemia
- 4. Anorexia and weight loss
- 5. Fatigue
- 6. Rectal lesions- tenesmus, alternating D and C

Colon cancer

- Diagnostic procedures & findings
 - 1. Fecal occult blood
 - 2. Sigmoidoscopy and colonoscopy
 - 3. BIOPSY
 - 4. CEA- carcino-embryonic antigen

Colon cancer

- Complications of colorectal CA
- 1. Obstruction
- 2. Hemorrhage
- 3. Peritonitis
- 4. Sepsis



Colon cancer

- Risk factors
 - 1. Increasing age
 - 2. Family history
 - 3. Previous colon CA or polyps
 - 4. History of IBD
 - 5. High fat, High protein, LOW fiber
 - 6. Breast Ca and Genital Ca
 - 7. Have an inflammatory disease
 - If you eat a lot of animal sources
 - If you're not physically active
 - Or Obese

Stages of Colon Cancer

- *Stage 0-*
- In Stage 0, the cancer is at a very early stage and is located only in the inner lining of the colon. The recommended treatment for Stage 0 colon cancer is surgical removal of the tumor, along with parts of the colon on either side of the tumor site. If detected early, colon cancer is highly curable and has a low risk for recurrence.

Stages of Colon Cancer (continued)

- *Stage 1-*
- in this stage, the cancer has grown through several layers of the colon, but is still confined to the wall of the colon. It has not spread to nearby organs as yet. Surgery is the recommended treatment at Stage I. Stage I is also highly curable, with a low risk for recurrence.

Stages of Colon Cancer (continued)

- *Stage 2-*
- In Stage II, the cancer has spread (metastases) to nearby organs or tissues, but not to the lymph nodes. Lymph nodes are small, bean-shaped structures where cells are stored; nodes can trap cancer cells or bacteria traveling through the body. The recommended treatment for Stage II is surgical removal of the tumor. Adjuvant therapy (chemotherapy and radiation therapy) is also suggested for Stage II patients with recurrences.

Stages of Colon Cancer (continued)

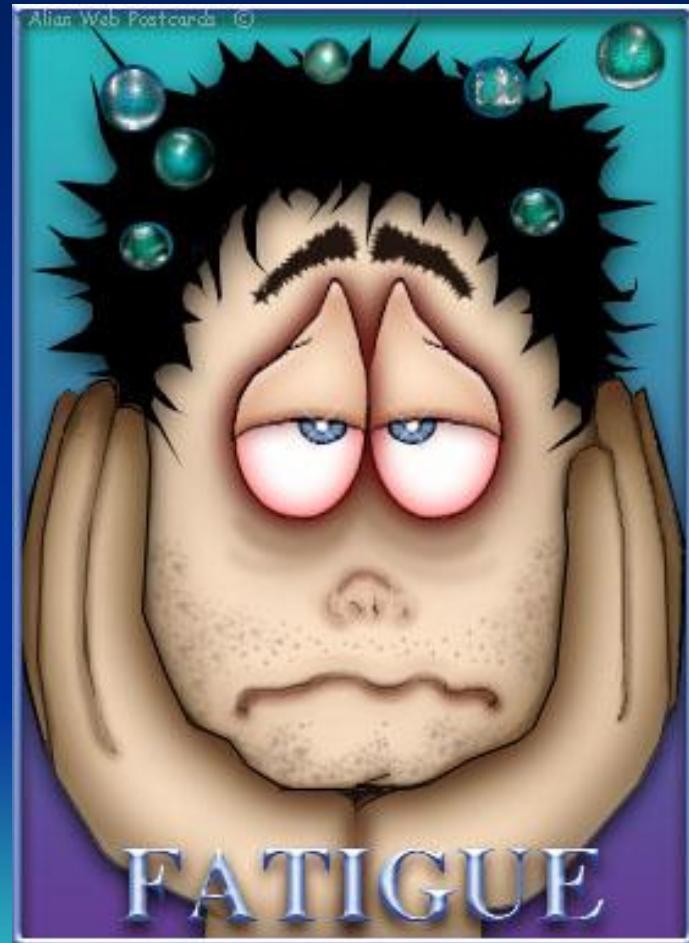
- *Stage 3-*
- In this stage, the cancer has spread outside the large intestine to regional lymph nodes, but not to other body parts. Treatment for Stage III colon cancer includes surgical removal of a section of the colon and rejoining the remaining ends (anastomosis). Surgery is usually followed by chemotherapy. Studies have shown that the number of lymph nodes involved affects the outcome. Patients with 1-3 nodes involved have significantly greater survival rates than those with 4 or more nodes involved.

Stages of Colon Cancer (continued)

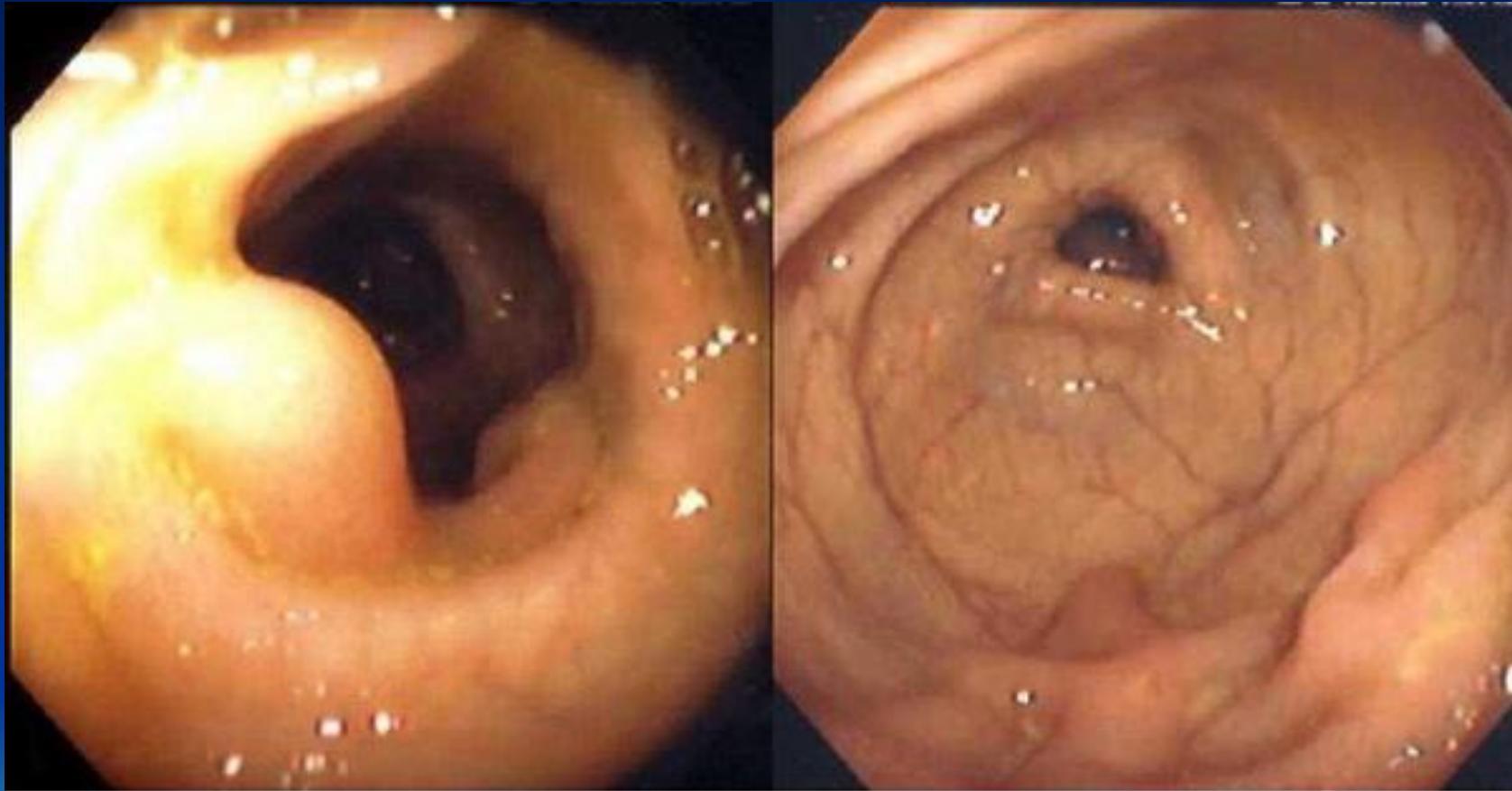
- ***Stage 4-***
- Stage IV is the most advanced stage of colon cancer. The cancer has spread beyond the colon, rectum or regional lymph nodes to distant organs or tissue (such as liver, ovaries and lungs). Although cancer is not usually curable at this stage, surgery is still the recommended treatment. Surgical resection of the colon and reconnection of the large intestine is done so as to blockage of the colon and any other local complications. Chemotherapy and/or radiation are generally given for palliative purposes.

Symptoms of Colon Cancer

- Persistent Constipation
- Diarrhea
- Blood in the Stool
- And Unexplained Fatigue



The Difference between a Normal Colon and a Colon with Cancer

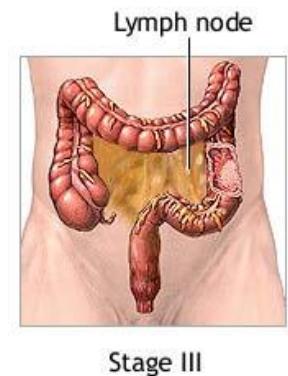
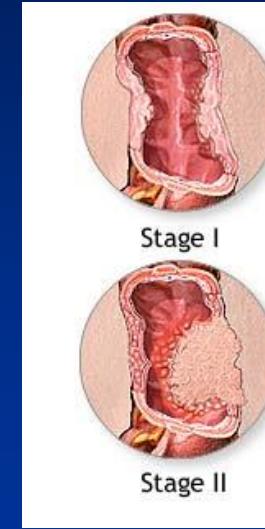


The Difference between a Normal Colon and a Colon with Cancer (Continued)

- The Colon on the Left is a normal Colon and the Colon on the right is a Colon with Cancer.
- You can see the difference of the two
- The normal Colon has a bigger opening and the Colon with cancer has a small opening
- There is also a difference in color. The normal Colon is more yellowish and the Colon with cancer is more tanish.
- Notice that the Colon with cancer has more veins and the normal Colon has fewer

Colon cancer

- MEDICAL MANAGEMENT
- 1. Chemotherapy
- 2. Radiation therapy



Colon cancer

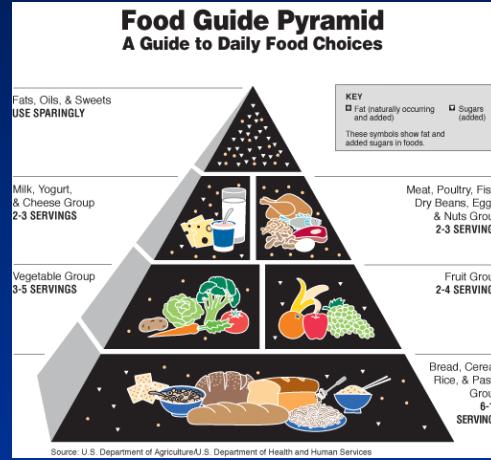
- SURGICAL MANAGEMENT
- Surgery is the primary treatment
- Based on location and tumor size
- Resection, anastomosis, and colostomy (temporary or permanent)

Surgery

- Surgery or "resection" of the colon involves cutting away the portion of the colon that is diseased, and reconnecting the two healthy parts (anastomosis).
- In a small percentage of patients with colon cancer (about 15 percent) the surgeon will be unable to reconnect the healthy parts. In such a case, a temporary or permanent colostomy is used. A colostomy is a surgical opening (stoma) through the wall of the abdomen into the colon, which provides a new path for waste material to leave the body. A special bag is worn to collect the body's waste.

Colon Cancer Preventions

- Colon cancer can be prevented and cured through early detection
- Changing your eating habits(more fiber and less fats)
- Don' t smoke and drink less



- You may have heard that taking aspirin prevents colon cancer. This is an exciting area of research, and studies are currently underway to evaluate whether aspirin can prevent the recurrence of precancerous colon polyps.

Future Research



Colon Cancer Deaths (Continued)

- Approximately 6% of Americans will develop colon cancer and 40% of those will die of the disease
- There are about 134,000 new cases and 55,000 deaths occur annually
- 90% of deaths are over people 45 years old

Colon cancer

NURSING INTERVENTION

Pre-Operative care

- 1. Provide HIGH protein, HIGH calorie and LOW residue diet
- 2. Provide information about post-op care and stoma care
- 3. Administer antibiotics 1 day prior

Colon cancer

NURSING INTERVENTION

Pre-Operative care

- 4. Enema or colonic irrigation the evening and the morning of surgery
- 5. NGT is inserted to prevent distention
- 6. Monitor UO, F and E, Abdomen PE

Colon cancer

NURSING INTERVENTION

Post-Operative care

- 1. Monitor for complications
- Leakage from the site, prolapse of stoma, skin irritation and pulmo complication
- 2. Assess the abdomen for return of peristalsis

Colon cancer

NURSING INTERVENTION

Post-Operative care

- 3. Assess wound dressing for bleeding
- 4. Assist patient in ambulation after 24H
- 5. provide nutritional teaching
- Limit foods that cause gas-formation and odor (Cabbage, beans, eggs, fish, peanuts)
- Low-fiber diet in the early stage of recovery

Colon cancer

NURSING INTERVENTION

Post-Operative care

- 6. Instruct to splint the incision and administer pain meds before exercise
- 7. The stoma is PINKISH to cherry red, Slightly edematous with minimal pinkish drainage
- 8. Manage post-operative complication



Healthy bowel
tissue is
stitched to
the abdomen
(colostomy)

adam.com

Colon cancer

- **NURSING INTERVENTION:
COLOSTOMY CARE**
- Colostomy begins to function 3-6 days after surgery
- The drainage maybe soft/mushy or semi-solid depending on the site

Colon cancer

- NURSING INTERVENTION:
COLOSTOMY CARE
- BEST time to do skin care is after shower
- Apply tape to the sides of the pouch before shower
- Assume a sitting or standing position in changing the pouch



Colon cancer

- NURSING INTERVENTION:
COLOSTOMY CARE
- Instruct to GENTLY push the skin down
and the pouch pulling UP
- Wash the peri-stomal area with soap and
water
- Cover the stoma while washing the peri-
stomal area



Colon cancer

- NURSING INTERVENTION: COLOSTOMY CARE
- Lightly pat dry the area and NEVER rub
- Lightly dust the peri-stomal area with nystatin powder



Colon cancer

- NURSING INTERVENTION: COLON CARE
- Measure the stomal opening
- The pouch opening is about 0.3 cm larger than the stomal opening
- Apply adhesive surface over the stoma and press for 30 seconds



Colon cancer

- NURSING INTERVENTION: COLOSTOMY CARE
- *Empty the pouch or change the pouch when*
 - *1/3 to 1/4 full (Brunner)*
 - *1/2 to 1/3 full (Kozier)*

THE END

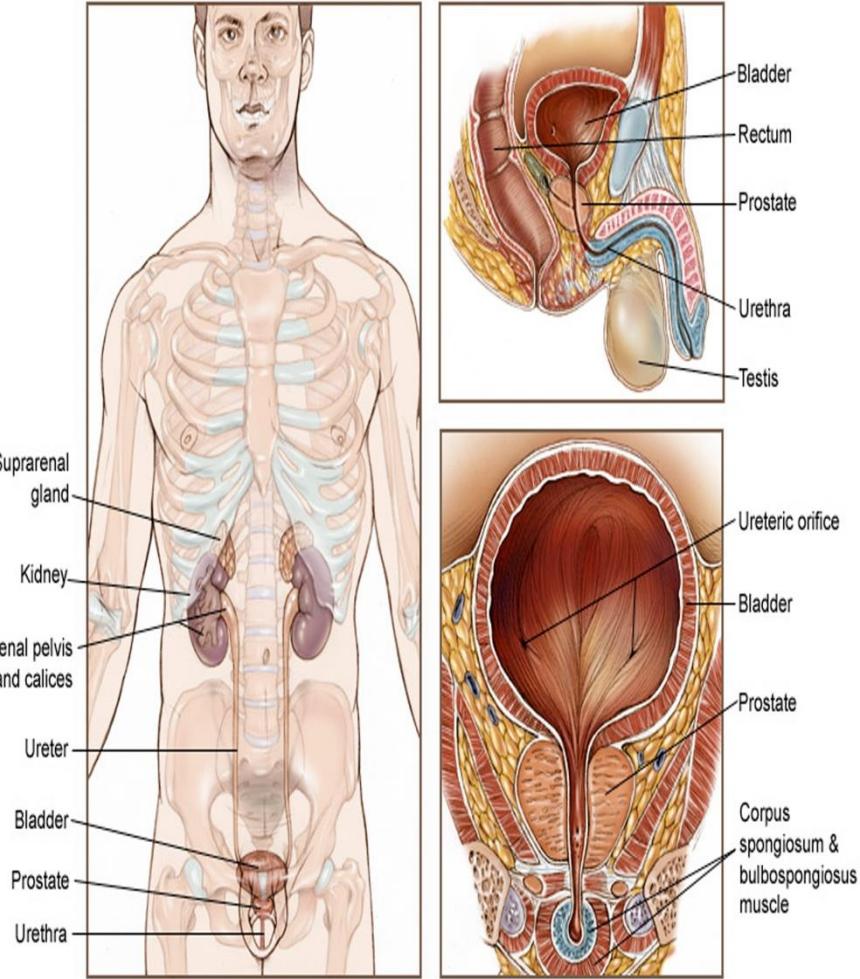
Benign prostate hypertrophy (BPH)

Prostate Cancer

Breast cancer
Dr Ibraheem Bashayreh, RN
PhD

What is the Function of the Prostate?

Robert Morreale/Visual Explanations, LLC



- The prostate is a walnut-sized gland located behind the base of the penis, in front of the rectum and below the bladder
- It surrounds the urethra, the tube-like channel that carries urine and semen through the penis
- The primary function of the prostate is to produce seminal fluid, the liquid in semen that protects, supports, and helps transport sperm

Benign Prostatic Hypertrophy (BPH)

- Enlargement of prostate gland which obstructs urinary out flow
- Urinary stream decreases, with dysuria
- Gradual dilation of ureters and kidney due to stasis
- Age related and slow progressing, usually >50
- Cause is unknown – possible arteriosclerosis, changes in hormone levels, or inflammation

Benign Prostatic Hypertrophy (BPH)

- Subjective symptoms
 - Urgency, frequency, burning, and hesitancy
 - Decreased force of urination
 - Nocturia
- Objective symptoms
 - Voiding small amounts
 - Hematuria
 - Urinary retention
 - Infection
 - Enlarged prostate on exam
 - Renal insufficiency

Benign Prostatic Hypertrophy (BPH)

- Diagnostic tests
 - Client history
 - Physical exam
 - Residual cath
 - IVP: An intravenous pyelogram (IVP) is an x-ray examination of the kidneys, ureters and urinary bladder that uses iodinated contrast material injected into veins.
 - BUN (The blood urea nitrogen) and creatinine levels
 - UA and C&S
- Cystoscopy

Benign Prostatic Hypertrophy (BPH)

- Treatment
 - Drugs
 - Testosterone ablating agents – diethylstilbestrol (DES)
 - Testosterone sparing – Proscar, which reduces the size of the gland
 - Alpha blockers – Flomax, relax smooth muscle in the bladder neck and prostate

Benign Prostatic Hypertrophy (BPH)

- Surgical removal
 - TURP
 - Subrapubic, retropubic, or perineal prostatectomy
- Other methods to improve function
 - Sexual intercourse, hot sitz baths, or prostatic massage- which releases prostatic fluid pressure

Benign Prostatic Hypertrophy (BPH)

- Post- op care routine +
 - With TURP will have a catheter, possibly 3-way for irrigation
 - Watch for blood clots
 - Keep accurate I/O
 - Give pain RX and antispasmodics
 - Encourage fluids

Benign Prostatic Hypertrophy (BPH)

- Complications
 - At risk for UTI and retention
 - Erectile dysfunction
 - Hemorrhage
 - Urinary leakage
 - Sterility

What is Cancer?

- A group of 100 different diseases
- The uncontrolled, abnormal growth of cells
- Cancer may spread to other parts of the body

What is Prostate Cancer?

- The most common type of cancer in men and second most frequent cause of cancer-related death in men
- An estimated 192,280 men diagnosed in the United States in 2009
- A malignant (cancerous) tumor that begins in the prostate gland
- Some prostate cancers grow very slowly and may not cause problems for years
- Prostate cancer is somewhat unusual in that cancer that has spread can be successfully treated

What are the Risk Factors for Prostate Cancer?

- Age
- Race/ethnicity (Black men at highest risk)
- Family history
- Diet
- Hormone
- Other

Prostate Cancer and Early Detection

- Prostate-specific antigen (PSA) test
- Digital rectal examination (DRE)
- Discuss screening with your doctor

What are the Symptoms of Prostate Cancer?

- Frequent urination, or weak or interrupted urine flow
- Pain or burning during urination, or blood in the urine or semen
- The urge to urinate frequently during the night
- Different symptoms if the cancer has spread: pain in the back, weight loss, fatigue
- None of the symptoms are specific to prostate cancer, could be caused by an enlarged prostate, a condition called benign prostate hyperplasia (BPH)

How is Prostate Cancer Diagnosed?

- PSA test
- DRE
- Diagnosis is confirmed with a biopsy
- Transrectal ultrasound (TRUS)
- Imaging tests can determine if the cancer has spread

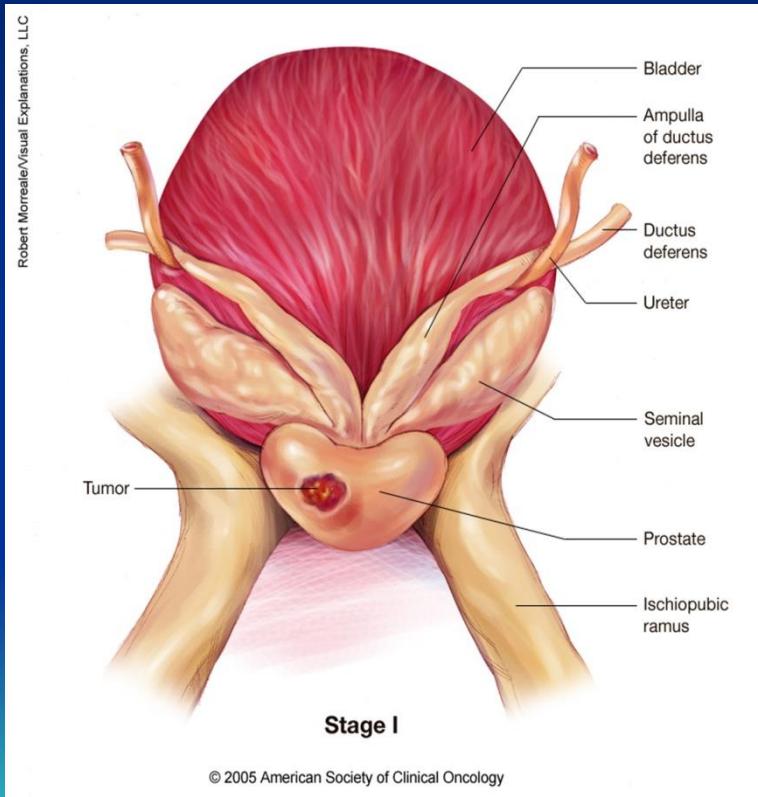
Prostate Cancer Staging

- Staging is a way of describing a cancer, such as the size of a tumor and if or where it has spread
- Staging is the most important tool doctors have to determine a patient's prognosis
- Staging is described by the TNM system (Classification of Malignant Tumours): the size and location of the Tumor, whether cancer has spread to nearby lymph Nodes, and whether the cancer has Metastasized (spread to other areas of the body)
- Another staging system assigns letters (A,B,C,D) to describe the cancer
- Treatment depends on the stage of the cancer

Prostate Cancer Grading

- Grade describes how much cancer cells look like normal cells (for example, do the cells look almost normal or very abnormal?)
- The grade of the cancer can help the doctor predict how quickly the cancer will spread
- The Gleason System is the most common grading system and describes the cell patterns seen under the microscope

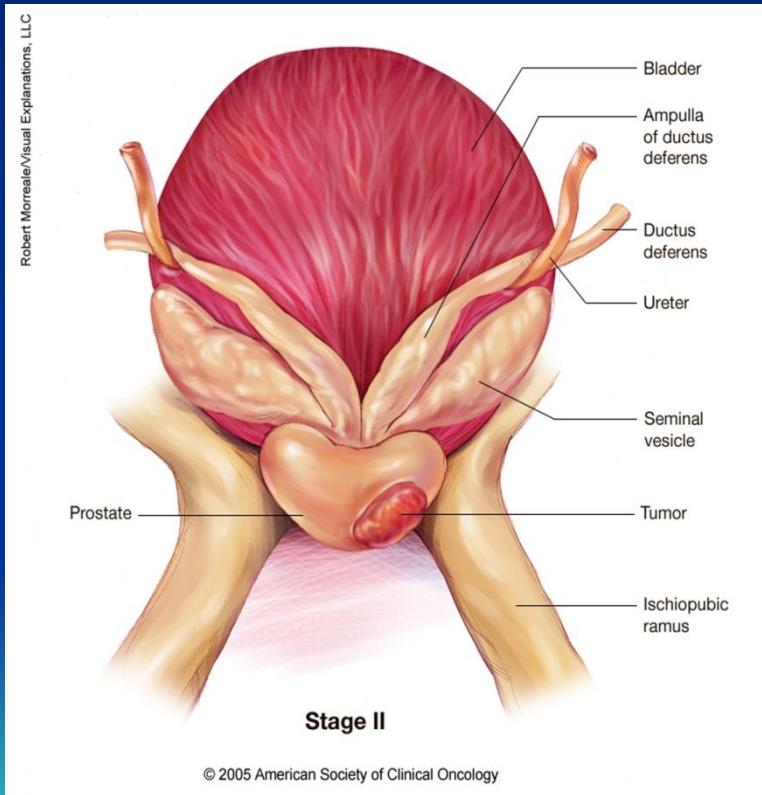
Stage I or Stage A Prostate Cancer



- Stage I cancer is found only in the prostate and usually grows slowly

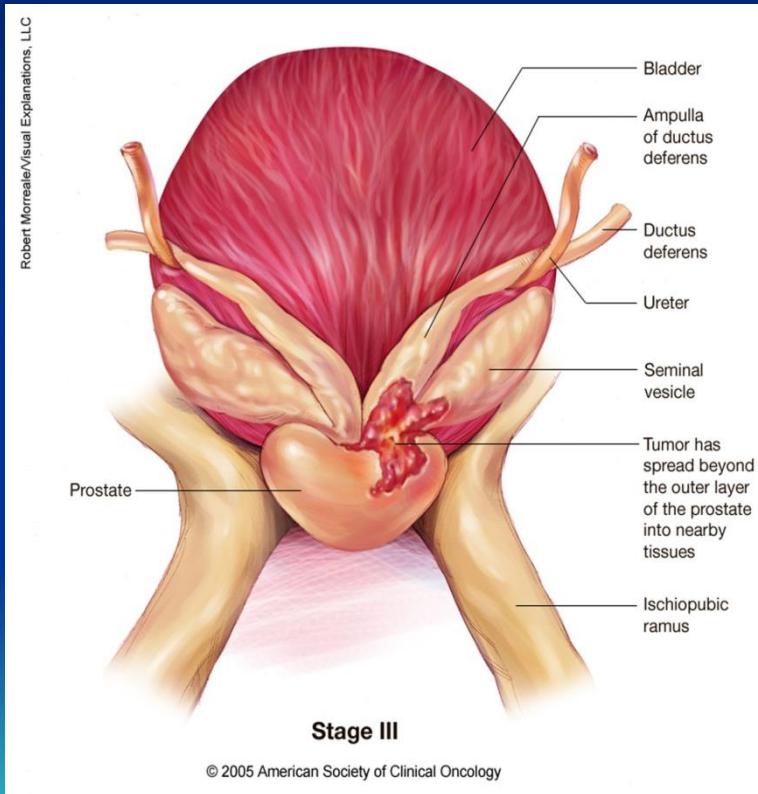
Stage II or Stage B Prostate Cancer

- Stage II cancer has not spread beyond the prostate gland, but involves more than one part of the prostate, and may tend to grow more quickly

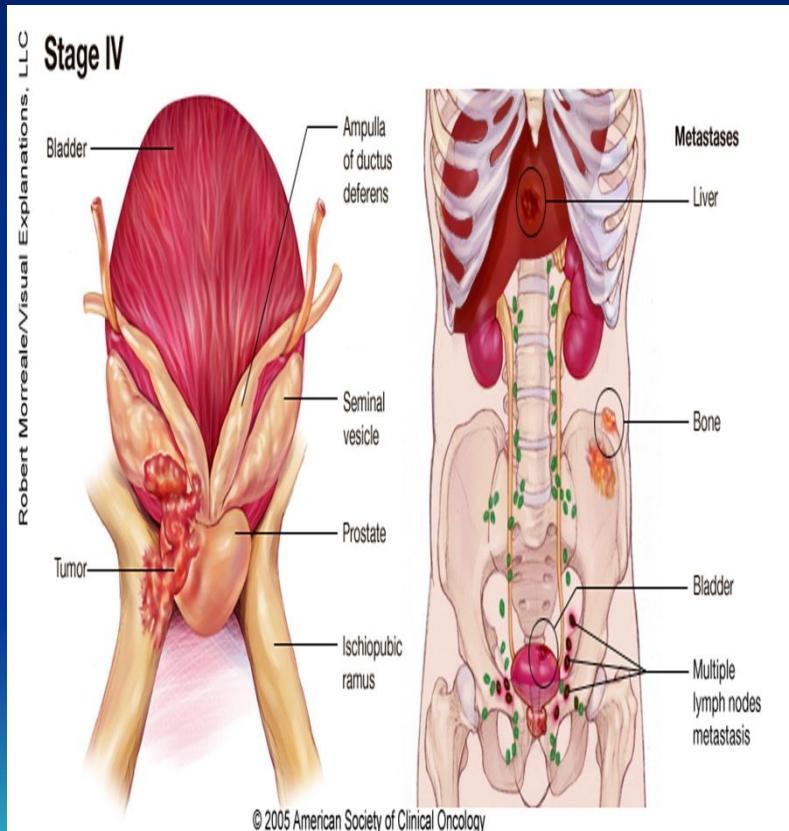


Stage III or Stage C Prostate Cancer

- Stage III cancer has spread beyond the outer layer of the prostate into nearby tissues or to the seminal vesicles, the glands that help produce semen



Stage IV or Stage D Prostate Cancer



- Stage IV cancer has spread to other areas of the body such as the bladder, rectum, bone, liver, lungs, or lymph nodes

How is Prostate Cancer Treated?

- Treatment depends on stage of cancer
- More than one treatment may be used
- Active surveillance (watchful waiting) for some early-stage cancers
- Surgery
- Radiation therapy
- Hormone therapy
- Chemotherapy

Cancer Treatment: Active Surveillance

- A way to monitor early-stage, slow-growing, prostate cancer
- Appropriate when cancer treatment would cause more discomfort than the disease itself
- Mostly used for older men or men who are unwell from other illnesses
- Treatment begins when the tumor shows signs of growing or spreading

Cancer Treatment: Surgery

- Used to try to cure cancer before it spreads outside the prostate
- Usually the prostate and nearby lymph nodes are removed
- Urinary incontinence and sexual side effects may result from surgery; these side effects are treatable
- Cryosurgery (destroying cancer cells by freezing) is still experimental; has high risk of impotence

Cancer Treatment: Radiation Therapy

- The use of high-energy x-rays to destroy cancer cells
- Used to try to cure disease or control symptoms
- External-beam: outside the body
- Brachytherapy: the insertion of radioactive pellets into the prostate
- Intensity-modulated radiation therapy (IMRT): small beams of radiation are aimed at a tumor from many angles
- Side effects may include bowel and urinary problems, rash, and dry, reddened, or discolored skin

Cancer Treatment: Hormone Therapy

- Reduces level of male sex hormones to slow growth of cancer
- Used to treat prostate cancer that has grown after surgery and radiation therapy or to shrink large tumors before surgery and radiation therapy
- Can be done surgically or through medication
- Hormone therapy may cause a variety of side effects, including a risk of metabolic syndrome

Cancer Treatment: Chemotherapy

- Use of drugs to kill cancer cells
- No standard chemotherapy for prostate cancer
- Docetaxel (Taxotere) and prednisone help men with advanced prostate cancer live longer
- Other medications may help control symptoms

Breast Cancer

- The most common form of cancer among women
- The second most common cause of cancer related mortality
- 1 of 8 women (12.2%)
- One third of women with breast cancer die from breast cancer



Risk Factors for Breast Cancer

- Female (1% male)
- Aging
- Relative (mother or sister)
- Menstrual history
 - early on set
 - late menopause
- Child birth
 - After the age of 30



Exogenous Estrogen

- Hormonal replacement therapy(HRT)
 - 30% increased risk with long term use
- Oral Contraceptives(OC)
 - risk slight
 - risk returns to normal once the use of OC's has been discontinued



Risk Factors for Breast Cancer

- Radiation exposure
- Breast disease
 - Atypical Hyperplasia
 - Intraductal carcinoma in situ
 - Intralobular carcinoma in situ
- Obesity
- Diet
 - Fat
 - Alcohol



Breast Cancer

- Prognosis
 - When cancer is confined to the breast, the 5-year relative survival rate is 96.8%;
 - cancer spread to surrounding tissue, 5-year rate is 75.9%;
 - disease has metastasized, the rate is 20.6%

Normal breast physiology and anatomy

- Symmetry and balance
- Size
 - weight
 - menstrual cycle
- pregnancy and lactation
- Texture
- Shape
 - age

Abnormal signs and symptoms

- Puckering
- Dimpling
- Retraction
- Nipple discharge
- Thickening of skin or lump or “knot”
- Retracted nipple

Abnormal signs and symptoms

- Change in breast size
- Pain or tenderness
- Redness
- Change in nipple position
- Scaling around nipples
- Sore on breast that does not heal

Staging of Breast Cancer

- The American Joint Committee on Cancer (AJCC) has designated staging by TNM
- T= tumor size
- N = lymph node involvement
- M = metastasis

Stage 1

- Tumor \leq 2.0 cm in greatest dimension
- No nodal involvement (N0)
- No metastases (M0)



Stage II

- Tumor $> 2.0 \leq 5$ cm
or
- Ipsilateral axillary lymph node (N1)
- No Metastasis (M0)

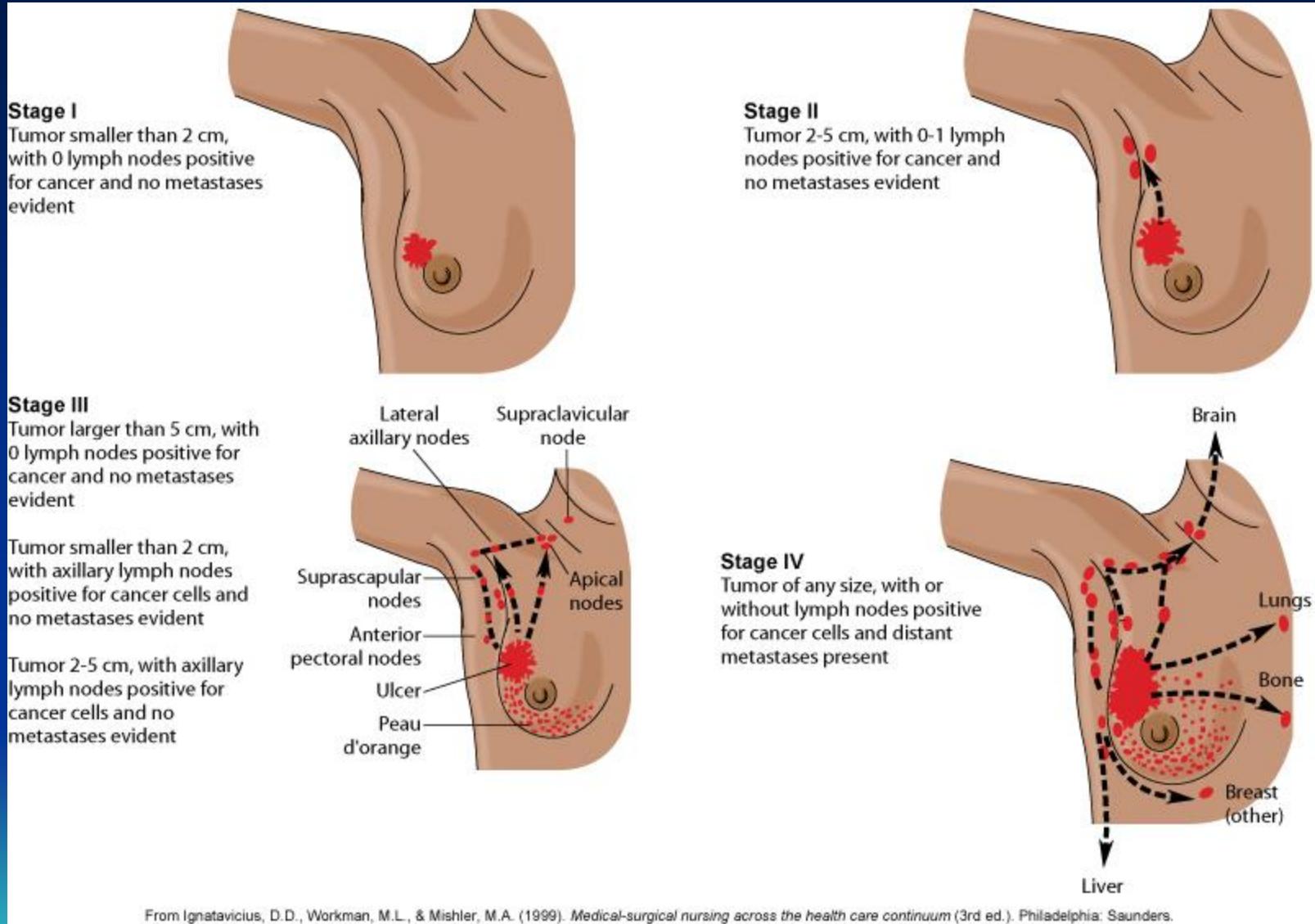


Stage III

- Tumor > 5 cm (T3)
- or ipsilateral (On the same side) axillary lymph nodes fixed to each other or other structures (N2)
- involvement of ipsilateral internal mammary nodes (N3)
- Inflammatory carcinoma (T4d)

Stage IV (Metastatic breast cancer)

- Any T
- Any N
- **Metastasis (M1)**



From Ignatavicius, D.D., Workman, M.L., & Mishler, M.A. (1999). *Medical-surgical nursing across the health care continuum* (3rd ed.). Philadelphia: Saunders.

Figure 47-14

Types of breast cancer

- In situ (an early form of carcinoma defined by the absence of invasion of surrounding tissues)
 - Intraductal (DCIS)
 - Intralobular (LCIS)
- Invasive
 - Infiltrating ductal carcinoma
 - Tubular carcinoma
 - Medullary carcinoma
 - Mucinous carcinoma

Methods of Detection

- Clinical exam by MD or nurse
- Mammography
- Monthly breast self-exam (BSE)

Clinical examination

- Performed by doctor or trained nurse practitioner
- Annually for women over 40
- At least every 3 years for women between 20 and 40
- More frequent examination for high risk patients



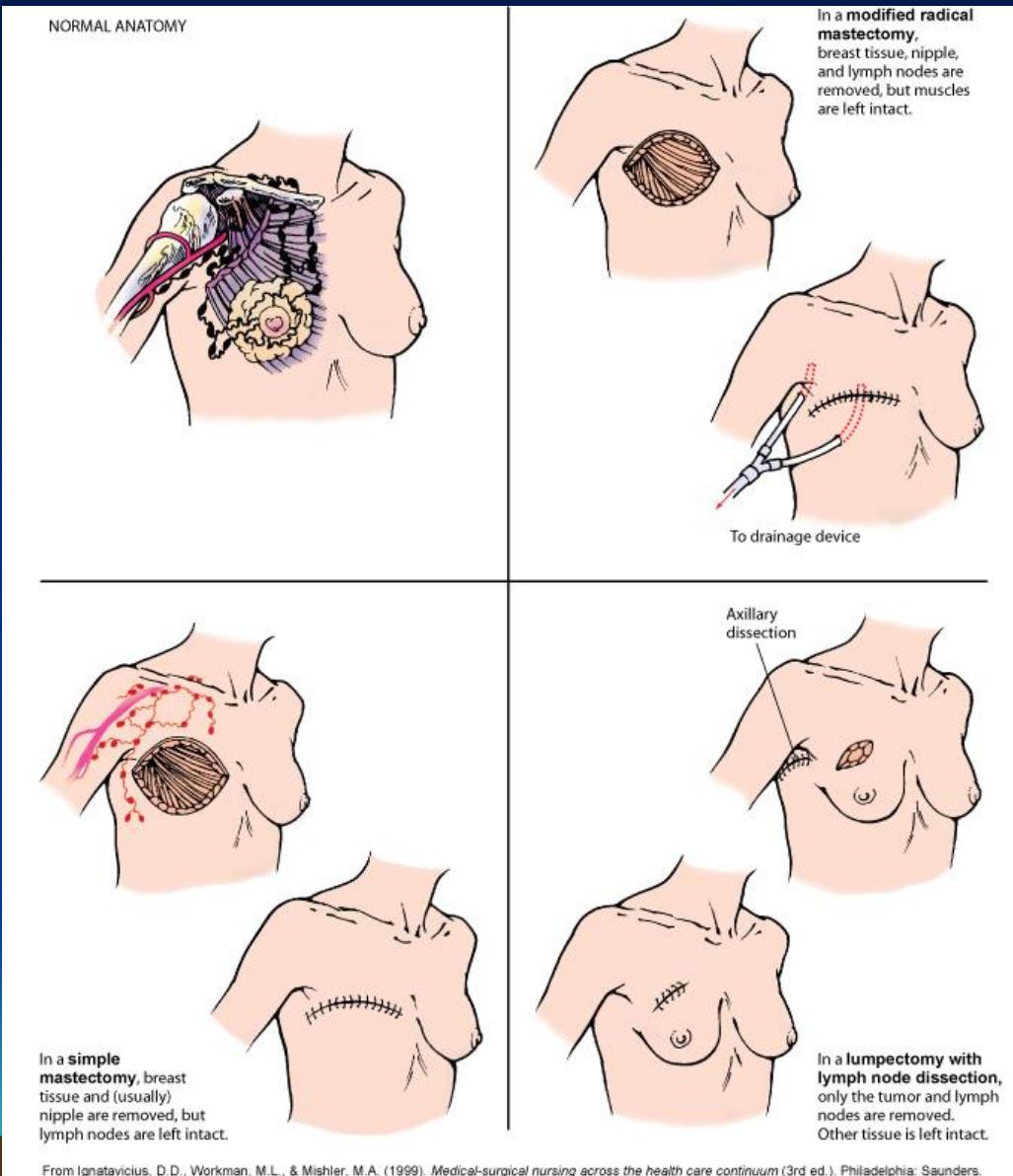
Mammography

- X-ray of the breast
- Has been shown to save lives in patients 50-69
- Data mixed on usefulness for patients 40-49
- Normal mammogram does not rule out possibility of cancer completely



Breast Cancer

- Medical treatment
 - Lumpectomy, simple mastectomy, and radical mastectomy
 - Staging: the tumor-node-metastasis classification
 - Critical factor determined—whether the cancer cells are estrogen receptors or nonreceptors
 - Tamoxifen: selective estrogen receptor modulator (SERM) prescribed for the estrogen receptors
 - Chemotherapy, hormone therapy, radiation therapy, biologic therapy, or a combination of these may be employed before, during, or after surgery



Breast Cancer

- Interventions
 - Disturbed Body Image
 - Risk for Injury
 - Impaired Physical Mobility
 - Deficient Knowledge

GOOD LUCK ANY QUESTIONS