

Basic Description of Malignant Tumors (Cancers)

The body is made up of many units called cells. The cell is far too small to be seen by the naked eye. Many specialized cells group together to form organs. An example of organs are heart, stomach and brain. The organs of the body work together silently and in unison to create a functioning person.

The cells of the body undergo a certain level of growth and decay everyday. A cancer occurs when cell division and replication goes out of control. Unfortunately, physicians usually don't know why cell metabolism becomes chaotic. The end result of this process on a variable time table, is that cancer cells form, enlarge and eventually interfere with normal body functions. This attack on the body involves spread to adjacent tissues and eventually, to distant sites. An example of spreading or metastasis is a lung cancer going to the brain carried there by the blood stream.

A cancer is a malignant growth or tumor. Not all tumors are malignant, some are benign. The benign growths do not tend to grow large or spread to other parts of the body. All tumors are finally diagnosed by having your doctor take a biopsy or a piece of the tumor and examine it under a microscope.

Cancer is the second most common cause of death in adults living in the USA next to cardiovascular disease which includes heart attack, stroke, and other types of problems.

Basic Outline for Lung Cancer

- I. Definition
 - a. A malignant tumor of the lung
- II. Background facts
 - a. It's the most common cause of cancer related death in men
 - b. There are more than 125,000 deaths annually
- III. Associated risk factors
 - a. Smoking (80-90% of cases)
 - b. Asbestos exposure
 - c. Secondary smoke
 - d. Coal exposure
- IV. Signs and Symptoms
 - a. Cough
 - b. Spitting up blood
 - c. Chest pains
 - d. Shortness of breath
 - e. Weight loss
- V. Early screening test
 - a. Sputum (Cytology)
 - b. Chest X-rays
- VI. Diagnosis
 - a. Bronchoscopy
 - b. Need biopsy
- VII. Treatment
 - a. Surgery
 - b. Radiation
 - c. Chemotherapy

Basic Outline for Prostate Cancer

- I. Definition
 - a. The prostate is a gland that surrounds the urine delivery tube in the pelvis
- II. Background facts
 - a. It's the most common non-skin related cancer in men
 - b. 10% of men will develop clinically evident cancer of prostate
 - c. 200,000 new cases occur per year
- III. Associated risk factors
 - a. Androgenic stimulation (example: testosterone)
 - b. Family history (2.5x increased risk)
 - c. More common in African Americans
- IV. Signs and Symptoms
 - a. Few early symptoms
 - b. Dysuria (pain in urination)
 - c. Hematuria (blood in urine)
- V. Early screening test
 - a. Rectal exam
 - b. Yearly rectal exams are recommended after age 50
 - c. Prostate specific antigen (PSA) blood test
- VI. Diagnosis
 - a. Needle biopsy
- VII. Treatment
 - a. Surgery
 - b. Radiation
 - c. Hormonal

Basic Outline for Colon Cancer

- I. Definition
 - a. A malignant growth involving the large bowel which is located in the abdomen
- II. Background facts
 - a. There is a 6% cumulative life time risk of developing this problem
 - b. There are 50,000 deaths per year in the USA
- III. Associated risk factors
 - a. Family history (increased risk by 2x to 3x)
 - b. African American heritage
 - c. Inflammatory bowel disease
 - d. Polyps (benign can become malignant)
 - e. Lifestyle factors
 - i. Obesity
 - ii. Diet rich in fat
 - iii. Inactivity
- IV. Signs and Symptoms
 - a. Abdominal pain
 - b. Persistent or changing pattern of diarrhea or constipation
 - c. Blood in stool
- V. Early screening test
 - a. Stool exam
 - b. Colonoscopy (tube insertion or “virtual” x-ray technique)
- VI. Diagnosis
 - a. Biopsy
 - b. Barium enema
- VII. Treatment
 - a. Surgery
 - b. Radiation
 - c. Chemotherapy