WHAT ARE THE DIAGNOSTIC TESTS FOR CANCER?

Usually the doctor may ask about personal and family medical history and do a physical exam of the patient. And further proceeds to the following tests if required:

LAB TESTS

- Tests of the blood, urine, or other fluids can help doctors make a diagnosis
- Tests show how well an organ is doing its job
- Also, high amounts of some substances may be a sign of cancer often called TUMOR MARKERS
- Doctors cannot rely on lab tests alone to diagnose cancer

IMAGING PROCEDURES

These create pictures of areas inside your body that help to diagnose the cancers. There are various imaging procedures in diagnosis, they are

X RAYS

- X-ray is one of the oldest forms of medical imaging, and despite all the newer, more sophisticated forms of scanning
- X-rays may be taken of any part of the body to detect a tumor



CT SCAN

- A series of detailed pictures of areas inside the body taken from different angles
- The pictures are created by a computer linked to an x-ray machine
- Also called CAT scan, computed tomography scan, computerized axial tomography scan, and computerized tomography



RADIONUCLIDE SCANNING

- Small amount of radioactive material will be injected. It flows through bloodstream and collects in certain bones or organs
- A machine called a scanner detects and measures the radioactivity
- The scanner creates pictures of bones or organs on a computer screen or on film. Your body gets rid of the radioactive substance quickly



ULTRASOUND

- An ultrasound device sends out sound waves that people cannot hear
- The waves bounce off tissues inside your body like an echo
- A computer uses these echoes to create a picture called a sonogram



MAGNETIC RESONANCE IMAGING (MRI) SCAN

- A strong magnet linked to a computer is used to make detailed pictures of areas in your body
- Your doctor can view these pictures on a monitor and can print them on film



POSITRON EMISSION TOMOGRAPHY (PET) SCAN

- A small amount of radioactive material is injected
- A machine makes pictures that show chemical activities in the body
- Cancer cells sometimes show up as areas of high activity



BIOPSY

There are two types of biopsies. They are

- **Excisional biopsy:** Surgeon removes the entire tumor. Often some of the normal tissue around the tumor also is removed
- Incisional biopsy: Surgeon removes just part of the tumor



PROCEDURE

- · Doctor removes a sample of tissue and sends it to a lab
- A pathologist looks at the tissue under a microscope. The sample may be removed in several ways:
 - With a needle: The doctor uses a needle to withdraw tissue or fluid.
 - With an endoscope: The doctor uses a thin, lighted tube (an endoscope) to look at areas inside the body. The doctor can remove tissue or cells through the tube.
 - With surgery: Surgery may be excisional or incisional.