Anne Arundel Diagnostics Imaging

Diagnostics
(PET/CT, CT, MR, X-Ray, Ultrasound)

OVERVIEW

Diagnostic Radiology is a field of medicine dedicated to using various imaging techniques in the diagnosis and evaluation of disease. X-ray or standard radiographs involve the transmission of x-rays through a patient to image bone and soft tissues, and the study yields a radiograph or plain film x-ray which is interpreted by the Radiologist regarding signs of disease. Cross-sectional imaging studies such as sonography, CT, and MRI yield cross-sectional images of the body's internal structures.

Ultrasonography involves the transmission of high frequency sound waves into the patient. The sound waves bounce back or echo on contacting structures in the body, and those echoes are used by the computer to reproduce an image.

In CT or computerized tomography, a pencil thin x-ray beam is rotated around the patient, and the transmitted x-rays are detected and counted by a computer to reproduce an axial CT image.

In MRI, (magnetic resonance imaging) manipulations of a magnetic field are utilized to image the molecular structure of tissues and reproduce an image of internal organs.

PET/CT identifies the presence of disease earlier than anatomic imaging techniques by fusing patient and physiology into a single image. It combines Positron Emission Tomography (PET) which detects the metabolic activity associated with tumor growth, with CT which pinpoints the exact physical location of lesions.

Once the images are taken, the studies are interpreted by a Board Certified Radiologist looking for signs of disease. The choice of the best imaging modality depends on many factors including the age and clinical condition of the patient, the organ being imaged, and the specific question being asked the referring physician.

All of these imaging modalities are available at one or more AADI locations.

SERVICES

- X-ray/Fluoroscopy
- CT
- CT Angiography
- Cardiac CT
- PET/CT
- MRI - High Field & Open
- MR Angiography
- Nuclear Medicine
- Ultrasound/Sonography
- Vascular Ultrasound
- Bone Density Testing
- Arthrograms
- Full Field Digital Screening Mammography
- Full Field Digital Diagnostic Mammography
- Breast Biopsies

Scheduling Phone: 888-909-XRAY (9729) • Scheduling Fax: 443-481-5001
www.AADimaging.com