

MEDICAL IMAGING (RADIOLOGY-NUCLEAR MEDICINE)

- Medical Imaging (Radiology-Nuclear Medicine)
 - Department of Radiology
 - Medical Services Provided
 - Angiography
 - Angioplasty and Stenting
 - Computed Tomography (CT)
 - Mammography
 - Magnetic Resonance (MR) Imaging
 - Radioscopy - Fluoroscopy
 - Ultrasonography & Doppler US
 - Ablation with RF & Microwave

3 magnetic resonances (3.0 and two 1.5 Tesla imaging),

3 computed tomography (all multi-slice)

2 digital angiography,

1 digital mammography,

There are many conventional radiography devices, most of which have digital systems.

There are also 10 ultrasonography devices, all with Doppler capacity. PACS ("Picture Archiving and Communication System") technology, which enables the digital circulation of medical images between departments, has facilitated the image and reporting processes for years, and provides rapid delivery of images and reports to clinicians.

Thanks to all these possibilities, approximately 200 employees of our department, including physicians, can perform 136 thousand CT, 63 thousand MRI, 17 thousand mammographies, 135 thousand ultrasonographic examinations and 7.450 angiographic interventions, most of which are for therapeutic purposes, and can undertake valuable research.

There are 4 bed day beds in the Interventional Radiology unit.



NUCLEAR MEDICINE

MYOCARD PERFUSION SYNTIGRAPHY

First, the image of the heart is taken after an injection containing radioactive material under resting conditions, then, under the supervision of a nuclear medicine physician and nurse, exercise on the treadmill for a while, and then an injection containing a radioactive substance is made through the previously opened vascular access. After the waiting period, the image of the heart is taken again.





GAMA CAMERA

Cardiovascular system, skeletal system, thyroid, parathyroid and other endocrine organs, genito-urinary system, gastrointestinal system, pulmonary system, central nervous system, infection and inflammation are screened with 4 double detector gamma camera systems in Nuclear Medicine Department.

Functions of all systems are examined with planar imaging.



BONE DENSITOMETRY

It is a test conducted to evaluate bone density loss to screen and measure bone mineral density. This test is used for the diagnosis of osteoporosis, the bone condition that develops as a result of calcium loss in the bones.



PET / CT

PET / CT is a nuclear medicine imaging method that is formed by the combination of PET (Positron Emission Tomography) and CT (Computed Tomography) devices, which enables to obtain metabolic and anatomical information about tissues and organs together and in a single shot. PET / CT detects the rays emitted by positron emitting radiopharmaceuticals given to the human body and displays its distribution in the body in three dimensions. With PET / CT, the functional-metabolic activity and structural (anatomical) features of the body can be shown simultaneously with a single examination. With this feature, PET / CT gains importance in early diagnosis by detecting metabolic changes in many pathophysiological conditions and diseases in the period when structural changes have not yet occurred.

In the early diagnosis and follow-up of PET / CT cancer diseases, determining whether any mass in the body is benign or malignant, detecting cancer recurrence and metastasis, treatment planning (staging, radiotherapy planning, biopsy site selection), determining the response of cancer patients to treatment and live plays a very important role in determining the presence of tumor cells.





