

DIAGNOSTIC IMAGING UNIT



Diagnostic Imaging Unit helps medical professionals look inside the patient's body to help determine the causes of an injury or illness and ensure that a diagnosis is accurate.

EQUIPMENT

- Ultrasound
- X-ray
- Electrocardiography
- Computed Tomography (CT)
- Magnetic Resonance Imaging (MRI)
- Single-Photon Emission Computed Tomography (SPECT)
- Positron Emission Tomography (PET)

PERSONNEL

- Radiographer
- Sonographer
- Nurse

CONVERSATION IN THE DIAGNOSTIC IMAGING UNIT

Guardian: Good Morning! My name is Mrs. Malls. My son is scheduled for some tests today.

Nurse: Good Morning, Mrs. Malls. May I have your son's name?

Guardian: Jonas Malls

Nurse: Okay. Please, have a seat while I check your son's chart.

Guardian: Thank you!

Nurse: May I know your son's doctor?

Guardian: Dr. Jake Smith

Nurse: Thank you. According to Dr. Smith's orders, your son will have MRI scan today.

Guardian: Yes. His anesthesiologist is Dr. Samson.

Nurse: I see. Before we meet Dr. Samson, I need to get your son's vital signs first.

Guardian: Sure

Nurse: Good Morning, Dr. Samson. This is Mrs. Malls and her son, Jonas. Her son is scheduled for MRI today.

Anesthesiologist: Yes, I know them. Thank you. Hello, Mrs. Malls. Hello, Jonas. How are you doing today?

Patient: I'm fine. Thank you. But I'm a bit scared with the test. How is it done?

Anesthesiologist: You don't have to worry. The scan is usually done as an outpatient procedure, which means that the patient can go home after the test. During the scan it is important to lie completely still. For this reason it might be necessary to give you anesthesia before you are tested. But before we give you anesthesia, I will introduce you first to the sonographer.

Patient: Sure doctor

Anesthesiologist: This is Mr. Takumi. One of the sonographers in this hospital.

Sonographer: Hello, I'm Mr. Takumi. How are you?

Patient: I'm scared to undergo the test. Is this necessary?

Sonographer: Yes, since you had an accident. An MRI scan can be used as an extremely accurate method of disease detection throughout the body. In the head, trauma to the brain can be seen as bleeding or swelling. You will be placed on a moveable bed that is inserted into the magnet. The magnet creates a strong magnetic field that aligns the protons of hydrogen atoms, which are then exposed to a beam of radio waves. This spins the various protons of the body and they produce a faint signal that is detected by the receiver portion of the MRI scanner.

Patient: Is an MRI scan dangerous?

DIAGNOSTIC IMAGING UNIT



Sonographer: There are no known dangers or side effects connected to an MRI scan. The test is not painful.

Patient: How long would it take?

Sonographer: The MRI scanning time depends on the exact area of the body studied, but ranges from 30 minutes to an hour and a half.

Patient: Ok

Sonographer: Alright. Shall we prepare for now?

Patient: Sure