ULTRASOUND EXAMINATIONS

What is ultrasound?
Ultrasound is a diagnostic method which uses high-frequency mechanical vibrations to gather information from the studied region or organ. Ultrasound can be used to study soft tissues and organs such as the pancreas, kidneys, liver, lymph nodes and the pelvic region. Ultrasound cannot be used to study bone tissue or air-filled organs (such as the lungs). Ultrasound can be used to assess the structure of organs without using ionizing radiation (X-rays).

Indications
Indications for an ultrasound scan include the examination of various tissues, but also procedures for acquiring tissue samples and carrying out treatment procedures such as the removal of excess fluid from the joints under ultrasound control. Ultrasound is the primary examination method for a number of diseases, but also a clarifying examination for certain findings. Ultrasound can be used to acquire a lot of information, and it is easily performed and safe. Distracting factors for the examination include gastric and intestinal gas and therefore it is necessary to prepare the abdominal cavity.

Preparation for an abdominal examination:
- Take the referral letter with you - the examination is not carried out without a referral letter.
For three days before the examination avoid sugary, gaseous and hard-to-digest food and beverages (peas, beans, cabbage, fresh curd, fat and smoked meats, confectionery products, energy drinks, mineral water) and fresh fruit and vegetables. Patients with constipation may undergo enema or take laxatives so that the intestines are empty before the examination. Pure tap water can be drunk without limit.

Before an upper abdominal ultrasound scan/upper abdominal IT IS NOT ALLOWED to:
- Eat at least 4 hours before the examination.
- Drink gaseous beverages.
- Chew gum.
- Smoke for at least 4 hours before the examination.
- Urinary bladder filling for upper abdominal complaints is not necessary (only if the referring doctor wants to study the whole abdomen, including the lower abdomen)

For examination of the kidneys, bladder and prostate, IT IS NECESSARY:
- To come to the examination with a filled urinary bladder.
- For this, about 1.5 litres of non-carbonated pure water (tap, well or spring water) should be drunk 2-3 hours prior to the investigation.
- The urinary bladder may be emptied only after the examination.
For the examination of renal arteries

A morning examination time should be reserved and the preparation is the same as mentioned above for the abdominal examination. Daily medications may be taken before the examination, except if the examination is targeted at the gallbladder.

No preparation is needed for: thyroid gland, joint, blood vessel to the extremities, breast or tissue ultrasound.

The examination is painless, but sometimes the doctor needs to apply pressure to the probe for better quality images, which may cause short-term discomfort.

What will happen during the course of the examination?
- Prior to the study you will be asked to remove clothes and jewellery (navel rings, etc.) from the study region. Then a probe with gel is placed on the skin. This can be cool.
- During the examination the probe will be moved along the skin surface of the study region.
- The examination is painless, but sometimes the performer of the examination needs to apply pressure to the probe for better quality images, which may cause short-term discomfort.
- Usually the study duration of one region is 15-20 minutes. If the ultrasound scan is accompanied with a treatment procedure, it may take longer.

Contraindications
Relative contraindication to the abdominal scan is gastric and intestinal gas, improper preparation and severe obesity.

Results of the examination
After the examination a radiologist/ultrasound specialist will analyse the obtained images and write the result of the examination. The results will be transmitted to the digital history in electronic form or on paper.

If you can't come to the examination at the agreed time, then please inform the Department of Radiology by phone on 44 73 561

Prepared by: Radiology department, 2016