

## Ultrasound examination

### Patient information

The purpose of this leaflet is to give patients information on the nature of ultrasound or ultrasonography (USG), its indications and contraindications and the preparation for and the course of the examination procedure.

If you cannot come to your examination at the agreed time, please let us know by calling 620 7200 and book a new time, if necessary.

### Nature of the examination

Ultrasound examinations are used to evaluate the size, shape and structure of various organs as well as the blood flow in vessels, in addition the presence and volume of any fluids in different areas of the body (e.g. abdominal cavity, joints). Generally, ultrasound examinations cannot be used to examine the lungs, stomach, digestive tract or skeletal system.

Ultrasound examinations use sound waves. The ultrasound machine processes the vibrations of the sound wave from the tissues and an image of the area under examination appears on the screen. The examination can provide us with a lot of information. The examination poses no risks to the patient.

An ultrasound examination usually takes 15-25 minutes. If the examination also involves a biopsy or drainage of fluids, it may take longer.

### Indications for the examination:

- evaluating the shape and size of internal organs and the thyroid, discovering and monitoring any changes;
- evaluating the state of larger blood vessels (e.g. thinning of blood vessels or presence of blood clots);
- evaluating changes in subcutaneous tissue and mammary glands;
- evaluating changes in muscle structure;
- evaluating the amount of fluid in joints

### Before the examination

If your stomach or pelvic region is examined, you will have to prepare for the procedure.

- You must not eat or drink carbonated drinks or coffee for at least four hours before examination of the internal organs (**liver, pancreas, gallbladder, spleen**).

If you do:

- your full stomach will obscure the pancreas;
- your gallbladder will empty after eating and cannot be evaluated;
- the gases resulting from digestion or the consumption of carbonated drinks will obstruct the monitoring of the organs.
- Your bladder must be full before the examination of the organs in the pelvic region (**kidneys, bladder, uterus, prostate**). Drink at least two glasses of water two hours before the examination and do not empty your bladder until after the examination.
- Emergency examinations of the stomach area can be done without any preparation but may not give as much information.
- Examinations of the thyroid, soft tissue or blood vessels does not require any preparation.
- When you come to the examination, wear clothes that will allow for comfortable removal around the examined area. Any bandages or jewellery around the area must also be removed for the examination.
- You can take medication prescribed by a doctor as usual.

### **Course of the examination procedure**

- During the examination, you will lie down or sit on the examining table. Sometimes you will have to change the position of your body. A gel will be applied to the examined area that is not greasy and can be easily cleaned. The doctor will then place the ultrasound scanner on your body and slide it along the examined area. The examination is painless, but you may feel some discomfort from the pressure of the scanner. For the examination to succeed, follow the instructions of the doctor or the nurse to breathe, hold your breath, turn over, etc.
- For rectal ultrasound examination of the prostate, a special probe will be inserted into the rectum. A lubricating and numbing gel will be used when inserting it and the procedure is generally not painful.
- If an additional procedure such as a biopsy is required, the area of the biopsy will be numbed, if necessary.
- In the case of a biopsy, please let the examination staff know of any medication allergies or use of blood thinners.

### **Contraindications**

Ultrasound examinations do not have any contraindications. The examination can also be done on pregnant women and children. If necessary, the examination can be performed multiple times in one day.

### **After the examination**

You will find out the results of the examination from your doctor.

### **Additional information**

Due to emergency examinations, the beginning of scheduled examinations may be delayed.

If you have any questions about the examination, please contact the helpline for radiological examinations.

When calling the helpline, you will not be able to book an appointment or receive information about the results of the examination.

You can reach the helpline from 08:00 to 16:00 Monday to Friday.

- telephone 666 5166
- e-mail [radiolooginfo@itk.ee](mailto:radiolooginfo@itk.ee).

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