

Information sheet for punch and vacuum-assisted breast biopsy

Dear patient,

you have been referred to us to investigate an unexplained breast lesion (e.g. a focus, microcalcifications). A biopsy is the removal of tissue from the breast using a needle.

What steps does the investigation involve?

First of all, an image of the suspicious lesion in your breast is obtained. Depending on the type of lesion, this image can be obtained using ultra-sound, X-ray (= mammography) or MRT (= magnetic resonance tomography). This ensures that the biopsy is performed in the correct place. After disinfecting the biopsy site and administering a local anaesthetic, a needle is pushed into the breast and tissue is removed. The material collected is then examined histologically in the laboratory. To ensure the area can be located in the future, it may then be marked with a clip about 2 mm in size. This will be helpful if any therapy is needed later. This clip is MRI safe.

After the procedure, the biopsy site must be firmly compressed to prevent any extensive haematoma. For this reason, you should wear a firm bra after the examination.

We recommend that you cool your breast and refrain from physically energetic activities (e.g. house-work, tennis, visiting the sauna, etc.) for at least 3 days. In most cases the examination takes between 15 and 35 minutes.

Imaging:

- The **stereotactic biopsy** is carried out on a specially designed mammography unit. During the procedure, X-rays are taken to enable highly accurate tissue sampling.
- You lie on your back for an **ultrasound-guided biopsy**. In this case, the position of the needle is monitored on the screen of the ultrasound unit.
- You lie prone for the **magnetic resonance tomography** guided biopsy, which is performed under guidance of an MR machine. During the examination a contrast medium is injected by an intravenous needle in your arm.

What complications may occur?

- Haematomas and a mild pain at the biopsy site, which generally do not require treatment.
- In rare cases circulatory disturbance (collapse) may occur.
- In rare cases, perforation of the pleural cavity (pneumothorax) may occur with ultrasound-guided biopsy.
- Very rarely, disturbed wound healing, infections or excessive scarring (keloids) may occur at the puncture site.
- Due to the administration of the local anaesthetic, allergic reactions and cardiovascular problems may occur in very rare cases.
- More severe bleeding, which in some circumstances may necessitate an operation, is extremely rare.

As far as is known in medicine at present, there is no risk to the patient due to the subsequent treatment if a malignancy is present and a few tumour cells are pulled into the puncture channel.

If you have any other questions, please do not hesitate to ask the medical technical staff.