



## What is mammography?

Presently, breast cancer can be treated with considerable success. Swedish research has progressed in the development of treatment forms for breast cancer. The results of treatment have improved immensely by integrating efforts and resources from medicine, surgery and radiation treatment. The early detection of breast cancer can make treatment both milder and more effective.

A mammography exam, or mammogram, is an x-ray image taken of the breast. A mammogram is taken by:

- Women undergoing a health check, or screening.
- Women who have themselves noticed an abnormality/lump or who have other symptoms with their breasts. They have been referred by a physician.
- Women who attend annual checks after operations.

### Mammography screening

Today, all women in a certain age interval are offered mammography screening. Each respective county council decides which age interval is to receive the examination. The National Board of Health and Welfare recommend that county councils offer mammography screening to women aged 40-74 years old with an 18 month interval if they are younger than 55 and, a two year interval if they are over 55. In Västra Götaland, management has decided on a 21 month interval between mammography screenings for all age groups.

Unilabs performs mammograms for the county councils of Skåne, Stockholm, Södra Älvsborg and Steungund.

### How is the procedure performed?

In a mammography examination two x-ray images per breast are taken at two different angles. The breast is compressed between two plates for a few seconds. Breast compression is necessary in order to produce sharp and clear images. The whole procedure takes only a few minutes and is performed by personnel who are trained in mammography screening.

The x-ray images or film is then read by a radiologist, a doctor specialising in mammography. At Unilabs, all mammogram images are assessed by two entirely independent radiologists. This is called double reading – four eyes see better than two – and increases the reliability and accuracy of the reading.

Sometimes, an x-ray image needs to be retaken. If the radiologist requires additional images and, if a



change or abnormality is detected in the breast, you will be notified and called for further examinations of mammogram images and possibly other investigation-al tests. In the event that you are recalled, this does not necessarily mean that you have breast cancer.

After mammography screening, the results are sent to your address directly within two to three weeks.

### Advantages and disadvantages of mammography screening

- Regular mammography screening makes it possible, in most cases, to detect breast cancer sooner than you, yourself, can feel it. Breast cancer which is detected early is seldom life-threatening. Scientific investigations have shown that breast cancer mortality may be reduced by 30-45% through mammography screening.
- No method of detecting breast cancer is 100% accurate, and mammography is no exception. Occasionally mammography image abnormalities can be seen that look suspicious, but on further examination, do not turn out to be cancerous. This happens



in approximately two cases per 100 mammograms. As a rule, only a few additional mammography images are required and usually an ultrasound examination for conclusive evaluation. Sometimes a biopsy may be needed and, though rarely, a minor breast operation.

- Mammography screening can not detect all cancerous tumours – some occur in the interval between a negative screening mammogram and the subsequent scheduled screening mammogram. This may be because the tumour has a high growth rate or that it does not produce any signs of abnormality on the mammography images.
- Mammograms can detect breast cancer at a very early stage. It is unlikely that all of these early cancerous changes will go on to develop into “dangerous” cancer. The use of screening mammography increases the detection of abnormal tissue growths or early stage cancer which would perhaps never have developed into “dangerous” cancer.
- When undergoing a mammogram, patients are exposed to a very low dose of radiation. This may be compared to background radiation, which everyone is exposed to from space, the ground and from natural radioactivity in the individual human body over a period of two months. According to the Swedish Radiation Safety Authority the risk of injury from radiation is negligible with regular as well as recurring examinations. When the breast is compressed the x-rays have a shorter route through the breast, which reduces the dose, already very low, of radiation even further.

### **Mammography referral**

Mammography examinations, outside routine screening, occur on referral from a physician.

All changes in the breast should be taken seriously and investigated. If you detect a change in your breast, you should contact your district healthcare centre or a breast clinic.

Examples of changes to the breast:

- A new lump in the breast or change in the contour of the breast.
- Dimpling of the skin or nipple.
- Bloody or clear discharge from the nipple

The examination results are sent to the physician who wrote the referral.

### **How common is breast cancer?**

Fear of the detection of cancer is natural. In Sweden, about 7 000 cases of breast cancer are diagnosed every year. This makes breast cancer the most common form of cancer in women. Approximately one in every nine women is affected by breast cancer during her lifetime.

### **How to self-exam your breasts**

Tumours can sometimes arise very quickly. This is why you need to make a habit of regularly self-examining your breasts. It is best to perform the examination on a specific day every month.

Anyone who suspects or discovers a lump in the breast should immediately contact a physician. It is important to get help on determining what kind of change you have detected. Not all changes in the breast are cancer. Tumours of the breast are more often benign (non-cancerous) than malignant (cancerous).

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