

Image guided needle localisation

Patient information

Why is a needle localisation done?

Some lumps or abnormalities within the breast, especially those found on a breast screening mammogram are too small for the surgeon to feel. Therefore, it is important for the radiologist to do a needle localisation procedure to guide the surgeon to the lump or abnormal breast tissue. This is done before your operation. The wire as well as the lump will be removed by the surgeon under general anaesthetic when you have your operation.

How is it done?

The radiologist carries out the procedure in the Breast Unit a few hours before the operation. You will be lying down although sometimes this may need to be done in the seated position, especially if a mammogram is used to guide the needle.

Local anaesthetic is injected into your skin to numb the area, close to the site of the lump or area to be removed. A special needle with a very fine wire inside it is inserted into your breast using the mammogram or ultrasound to guide the needle.

When the mammogram or ultrasound confirms that the tip of the needle is lying in the correct position the needle is withdrawn, leaving the wire in place in your breast. There is a small hook at the tip of the wire which prevents the wire from moving before the operation. Part of the wire will be outside the breast and this will be securely taped down.

A mammogram is performed at the end of the procedure to check the position of the wire in the lump or the area of your breast to be removed. This will complete the image guided needle localisation.

What will I feel during the procedure?

You will feel a pin-prick and stinging sensation during injection of local anaesthetic which starts to work very quickly. During the procedure there should be no further

pain although there may be a sensation of pressure and sometimes discomfort when the wire enters the lump. Please let the radiologist know straight away if you experience pain when the wire is being placed in the breast.

If the procedure is performed using a mammogram to guide the needle, there may be some discomfort from the compression of the breast in the machine. However, this is usually well tolerated and the 'tightness' from the mammogram is likely to settle quite quickly.

What are the risks of having this procedure?

It is unusual to have complications or problems from this procedure. There may be some bleeding at the site of the needle insertion but this is normally minor and controlled by pressing on the skin at the time.

Sometimes the mammogram performed after the procedure shows that the wire is not in the ideal position. In these circumstances the radiologist usually removes the first wire before inserting a second wire into your breast.

If the area or lump requiring removal lies close to the chest wall at the back of the breast, it is possible for the wire to penetrate through the muscle and into the lung space. This would require a specialist surgical team to remove it. Fortunately, this is an extremely rare complication as the wire is guided by the mammogram or ultrasound at all times.

What happens after the procedure?

You will have a mammogram to check the position of the wire. Once the radiologist is satisfied that the wire is in the correct position on the mammogram, the image-guided needle localisation procedure will be complete.

You will then be escorted back to the day unit/ ward to wait for your operation.

For more information

Contact the Breast Clinical Nurse Specialists on 01225 824057 (Monday to Friday).

Royal United Hospitals Bath NHS Foundation Trust
Combe Park, Bath BA1 3NG
01225 428331 www.ruh.nhs.uk

Please contact the Patient Advice and Liaison Service (PALS) if you require this leaflet in a different format, or would like to feedback your experience of the hospital. Email ruh-tr.pals@nhs.net or telephone 01225 825656/ 826319.