Royal United Hospitals Bath
NHS Foundation Trust

Image guided needle localisation

This leaflet gives information about needle localisation; a technique used to help the surgeon accurately remove small or difficult to feel lumps within the breast

Why is a needle localisation done?

Some lumps or abnormalities within the breast are too small for the surgeon to feel, especially those found on a breast screening mammogram. Therefore, before your operation a procedure needs to be done under local anaesthetic by the breast radiology specialist to help the surgeon locate the site of the abnormality. This usually involves having a wire inserted into your breast.

How is it done?

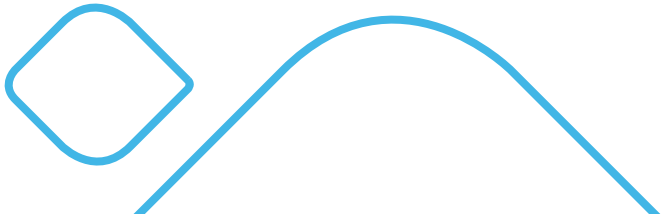
This procedure is carried out in the breast unit before you go to the operating theatre. An ultrasound or a mammogram may be done before the procedure to plan exactly where to place the wire. Usually you will be lying down although sometimes you may be sitting upright, especially if a mammogram is used to guide the procedure.

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

When the tip of the needle reaches the abnormality, the needle is withdrawn, leaving the wire in place in our breast. There is a small hook at the tip of the wire which prevents it from moving before the operation. Part of the wire will be outside your breast, and this will be taped down securely.

What will you feel during the procedure?

You will feel a pin prick and a stinging sensation during injection of the local anaesthetic which starts to work immediately. After this there should be no further pain when the localisation needle is inserted into your breast. There may be a sensation of pressure or a feeling of discomfort when the wire enters the lump. If you experience pain during the procedure, please let the specialist know right away.



If a mammogram is needed to guide the procedure, 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 should settle quickly.

What are the risks of having this procedure?

Complications or problems from this procedure are unusual:

- Fairly common - There may be some bleeding at the site of the needle insertion which is normally easily controlled by the assistant placing pressure at the site.
- Unusual - The mammogram performed after the procedure occasionally shows that the wire is not in the best position. If this happens, the first wire is usually removed before repeating the procedure and placing a second wire in position.
- Rare – if the abnormality lies close to the chest wall at the back of the breast, it is possible for the wire to penetrate through the muscle in to the lung space. A specialist surgical team would be needed to remove it. As the procedure is guided by ultrasound or a mammogram at all times, this is an extremely rare complication. What happens after the procedure?

What happens after the procedure?

A mammogram will be done to confirm the position of the wire. Once the specialist is satisfied with the position, the procedure is complete and you will return to the day unit to wait for your operation

Need more information?

Contact our Breast Clinical Nurse Specialists in the Bath Breast Unit by calling 01225 824057

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Royal United Hospitals Bath NHS Foundation Trust
Combe Park, Bath, BA1 3NG

01225 428331 | www.ruh.nhs.uk

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Date of publication: August 2025 | Ref: RUH BRU/007
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