

What is a sentinel node biopsy (SNB)?

Sentinel node biopsy is a more accurate way of determining if breast cancer has spread to the lymphatic system.

SNB is a procedure that consists of 2 parts.

Part one

You will then attend X-ray Department-Nuclear Medicine, on the day of your surgery, or the day before at a time arranged by the Secretary's.

On arrival you will be asked to put on a gown, and then to lie flat on a bed. A small amount of radioactive isotope will be injected at the edge of the areola (dark area around the nipple) of the affected breast, which may sting a little. You will then be asked to massage this area for approximately 5 minutes. The isotope is left for 20 minutes to travel through your lymphatic system, after which sometimes you will be scanned to identify the sentinel node (SN). If this has been done then the technician will mark your skin to identify where the sentinel node is. It is important not to wash these marks off.

Part two

During the operation a probe will measure the radioactive reaction in the breast. If this reading is adequate your surgeon may not use the blue dye. However, if required a small amount of blue dye will be injected in the same area as that used for the isotope. The lymphatic fluid carries the isotope and blue dye to your sentinel node (SN) in your axilla (armpit) and will turn up to 4 nodes blue (usually 1 or 2). The surgeon will remove any

nodes that have turned blue for further testing, to determine if breast cancer cells are present or not.

What if the sentinel node biopsy fails?

Occasionally it is not possible to identify the sentinel node; if this happens the surgeon will remove a few nodes from the base of the axilla for testing and is referred to as an axillary node sample.

After surgery

The lymph nodes removed during surgery will be examined by pathology under a microscope. This can take two to three weeks before the results are available.

Benefits

Greater accuracy with minimal intervention

No drains

Shorter hospital stay and quicker overall recovery

Less risk of developing lymphoedema (swelling of the arm/hand)

Less discomfort and early mobility in the shoulder/arm

Disadvantages

Blue dye will discolour urine, stools, contact lenses (please remove before surgery) tears, etc. Breast skin will also be discoloured for up to a few months and very occasionally a year or so.

Allergic reaction to the blue dye can rarely occur whilst under the anaesthetic. This can be treated but can (very rarely) be severe.

Injection of radioactivity into the breast may give slight discomfort.

If the lymph nodes removed contain cancer cells, you may require a second operation to your axilla (armpit).