

SENTINUS

SENTINEL LYMPH NODE IDENTIFICATION WITH CONTRAST
ENHANCED ULTRASOUND IN BREAST CANCER

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Step by Step Guide for using intradermally injected microbubbles and contrast enhanced ultrasound to find and biopsy sentinel lymph nodes

Patient Consent

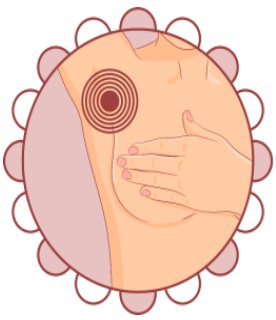
- Discuss small risk of tingling at injection site.
- Discuss small risk of allergic reaction to contrast (<1/100).
- Discuss small risk of bleeding complication after biopsy (<1/100).

Ultrasound Set Up

- Linear probe ML6-15 MHz.
- Ultrasound Gel.
- Setting.
- Greyscale setting.
- Contrast setting.

Room Preparation

- Preparation tray
- 2x ampoules of 1% lidocaine.
- 1x 26G (Brown) needle.
- 1x 25G (Orange) needle for axillary biopsy.
- 1x 1ml Syringe for administration of microbubbles.
- 1x Biopsy Gun.
- 1x Ultrasound Gel Marker.
- Dressings.



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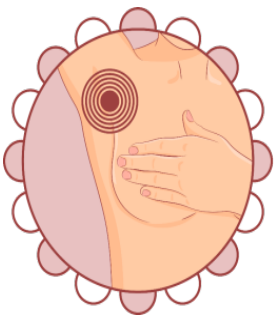
Contrast agent preparation

SonoVue pack - (contains introducer, fluid with syringe attachment, plunger and sulphur hexafluoride (SH)).



- Uncap SH and place into introducer and press firmly.

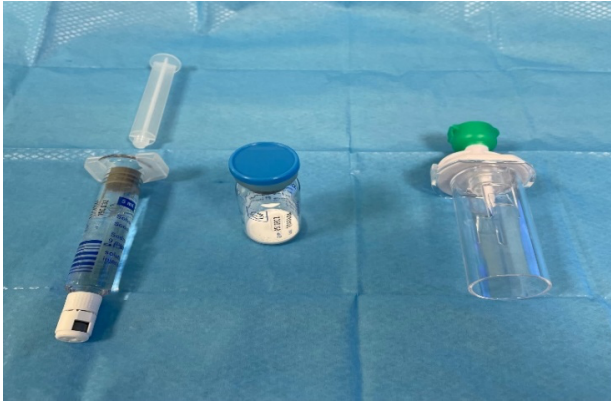




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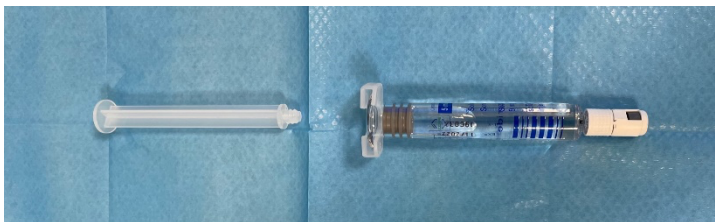
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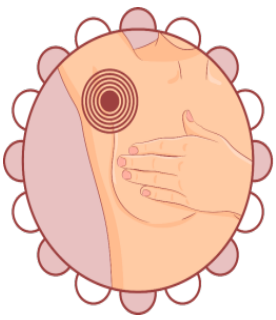
- Open green cap and inject 2mls of fluid.
- Ensure air is expelled.
- Connect and twist injecting 2mls of solution and seal cap.
- Shake vigorously for 30 seconds to ensure all powder has dissolved.

Procedure

- Clean skin with antiseptic (axilla to areola).
- Inject areola with local anaesthetic to numb the area (this may need to be repeated).



- Draw up 0.4ml of microbubbles.
- Ensure ultrasound is on single view.
- Rotate while injecting microbubbles and massage area to encourage contrast to move into breast tissue and lymphatic channels.

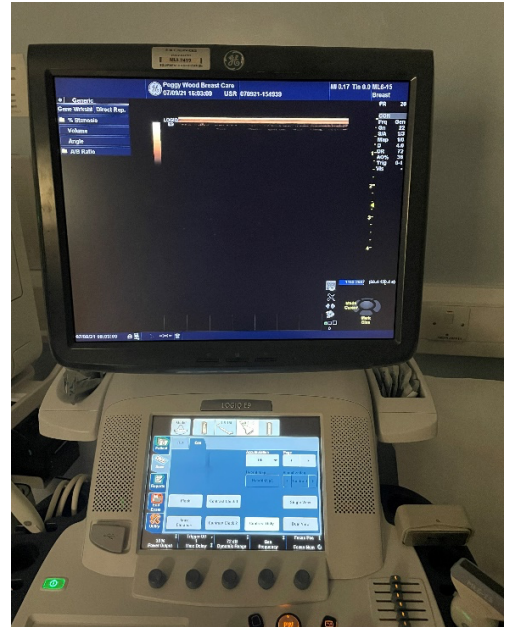
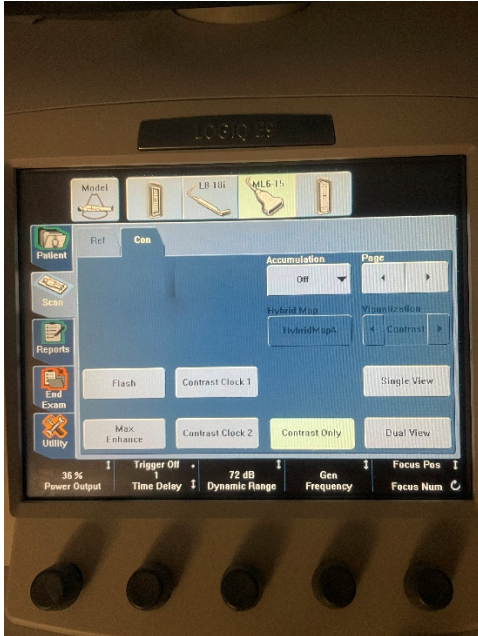


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- Follow bubbles with ultrasound to axilla to locate sentinel node using contrast mode.



- Once the lymph node has been located switch ultrasound to greyscale.
- Inject local anaesthetic to perform biopsy of lymph node cortex.
- Deploy marker into biopsied area.
- Apply pressure and dressing to the area.
- Ensure patient has standard aftercare information sheet following biopsy procedure.