



Diagnostic Breast Ultrasound Protocol Cheat Sheet

Indications on When To Perform a Diagnostic Breast Ultrasound

A diagnostic breast US (ultrasound) may be appropriate to be performed on patients whose clinical profile is consistent one of the following three areas;

- Symptomatic (e.g. lump, focal pain, nipple discharge, thickening of the skin, or change in breast shape or size) men or women with a referral for a breast US
- Asymptomatic men or women with a personal history of breast cancer and a referral from a medical provider
- Men or women who require short-interval follow-up (BI-RADS 3) from a previous diagnostic mammogram and/or breast US
- Women who have a BI-RADS 0 incomplete screening mammogram requiring additional breast imaging

Imaging Protocol

The following steps outline the protocol to complete a diagnostic breast US.

- Prior to Patient Arrival: Review the screening mammography report. If the screening report states that the breast US is:
 - Recommended: Perform the breast ultrasound before or after diagnostic mammogram depending on the patient appointment order.
 - Possible: Wait until the radiologist clarifies if the breast US is required. The radiologist will also provide additional information as to what area of the breast needs to be evaluated. The Radiologist will provide this information after diagnostic mammogram is performed
- Image Acquisition: Different patients will need different breast US images. The four most common diagnostic breast US image needs are: 1, a targeted area exam as dictated by the radiologist on the screening mammogram report, 2, a whole breast exam for a symptomatic patient, 3, a specific area if a palpable breast lump is detected, 3, radiologist may recommend whole breast ultrasound for a BIRADS 0 (call backs). The necessary views for each of these four patient types is listed below.
 - **Targeted Area Post Screening Mammogram**: Entire breast quadrant is evaluated in radial and antiradial planes. Pathological findings must be documented in two planes. Below are the images that need to be acquired.
 - B-mode radial and antiradial planes
 - Color Doppler analysis in radial and antiradial planes
 - Measurement of lesion in length, height, and width
- Be sure to document any pertinent family history of prior breast cancer.



Whole Breast for Symptomatic Patients:

** Be sure to sweep entire quadrants adequately and document several images in both radial and antiradial.

** Be sure to label LT or RT Breast.

** If pathology noted, add the specific CLOCK location in addition to the distance from the nipple.

Acquire the following images for **WHOLE BREAST**:

1. UOQ radial Images
2. UOQ antiradial Images
3. UIQ radial Images
4. UIQ antiradial Images
5. LIQ radial Images
6. LIQ antiradial Images
7. LOQ radial Images
8. LOQ antiradial Images
9. Nipple Transl
10. Nipple Sag image (18% of cancers retroareolar)

*****Pathology documented in radial and antiradial with and without color Doppler***

- **Breast Lump:** Evaluate breast parenchyma for the entire quadrant(s) that contain the breast lump.
 - Annotate with area of lump and note on preliminary worksheet if you can feel the lump
 - B-mode radial and antiradial images within breast quadrant(s)
 - Color Doppler of breast lump in radial and antiradial imaging planes
 - Measure any pathological findings in length, height, and width
- **Post Procedure:** Complete the following steps after a breast US has been performed.
 - An Imagen affiliated interpreting radiologist will review all completed diagnostic breast imaging and may ask for additional imaging. Allow time for radiologist review prior to the patient leaving the exam room.
 - Once the radiologist reviews the images and confirms that no additional images are needed, ask the patient to dress and proceed to the consultation room
 - Walk the patient to the virtual consultation room
 - Connect to the VitalNet platform and sit with the patient through the consultation with the radiologist.
 - Support the patient post consultation.
 - Schedule and coordinate the patient for any additional breast imaging services

-Diagnostic Breast Ultrasound Protocol Cheat Sheet End-