

Breast ultrasound examination checklist

1	Counsel, obtain relevant history
	Greet the patient politely. Note the presenting complaints (if any) and indication of the study. Review the findings of clinical breast examination
	Note the patient demographics including age, menstrual history, parity, age of the youngest child, lactational history, risk factors for breast cancer and prior surgery
2	Patient preparation
	Make the patient comfortable and ensure her privacy at all times
	Instruct the patient to undress from the waist up and make her wear a gown during the procedure
	A female supporting staff nurse or a female attendant is mandatory while the test is performed
	Position the patient with support beneath the chest to elevate the breasts for optimal and complete evaluation. This also limits the movement of the breasts. A head rest pillow helps in positioning the patient
	Both arms are raised and placed above the head to expose entire breasts and axilla for the test. In case the patient has any comorbidities (eg, frozen shoulder, spine surgery, cervical spondylosis, etc.) and is unable to be ideally positioned, the best manageable position under the circumstances should be achieved
	Turn the patient to right decubitus position for examination of the left axilla and far lateral breast tissues along the left axillary line to complete the test. The same is repeated with woman turned to left decubitus position for examination of the right axilla and lateral tissues of the right breast
3	Procedural steps for USG
	Apply ultrasound gel directly on the skin of the breast
	Perform 2D grey scale ultrasonography with uniform pressure of the hand and probe
	Place the transducer on the breast and move cranial to caudal in a longitudinal and/or transverse movement over the entire breast bilaterally until the desired images are captured
	Evaluate the breast tissues echogenicity on ultrasound
	Capture the images if you detect a finding
	Detail the lobular anatomy in the mammary zone and the homogenous arrangement of the ducts, their branches and the lobules
	Take into account all necessary assessment of the finding which includes measurements, localization, color Doppler changes, associated findings while scanning and capturing all images
	Scan both breasts completely in all quadrants and retromammary region along with axilla for additional findings as well as associated features
	Perform circular and angulated probe movement to include all tissues of this region with special attention to the nipple areola complex
	Use colour doppler to evaluate the vascularity of the lesion
	Look for cancer morphological characteristics mass lesion to differentiate from benign lesion
	Look for calcifications with or without a mass
	Look for architectural distortion to underline malignancy

	Look for skin changes
	Look for nipple changes, nipple retraction, nipple ulceration or nipple-areola skin changes
	Look for axillary nodal abnormalities, reactive nodes or nodes with features suspicious of metastatic nodes
	Perform an ultrasound-guided biopsy/FNAC if the ultrasound examination reveals a suspicious abnormality
	Wipe off the ultrasound gel from the skin
	Allow time for the patient to get dressed
4	Information about USG report
	Provide clear instructions to the woman on USG report and follow-up
	Provide the details of the clinic/person to be contacted if the examination reveals a suspicious abnormality