

Quick reference chart for clinical breast examination

Normal breast



Normal female breasts: Note similar size and shape, nipples at the same level, normal nipples, areola and skin

Lateral view of normal female breasts: Note similar size and shape, nipples at the same level, normal nipples, areola and skin

Normal female breasts: Note similar size and shape, nipples at the same level, normal nipples, areola and skin

Normal nipple and areola

Inverted nipple, horizontal slit is a normal variation. It should not be diagnosed as retracted nipple as there is no underlying lump or other sign of breast cancer

Lump



Single, painless, hard lump in the lower outer quadrant of the right breast just below the areola with restricted mobility

Single, painless, hard lump in the lower quadrants of the left breast causing fullness of the areola. Note crustations and deviation of nipple

Painless, hard lump in the upper outer quadrant of the left breast with restricted mobility. The lump is more prominent on raising both arms

Lobulated hard lump in the upper outer quadrant of the right breast

Large, lobulated hard lump in the upper half of the left breast with fixation to the skin

Change in volume/shape



Increased volume of the left breast. The left nipple is at a higher level than the right. Note the reddish, inflamed overlying skin, due to inflammatory carcinoma

Large, hard lump occupying the lateral half of the right breast increasing the volume with change in size and shape

Lump in the left breast with fixation of overlying skin and retraction of the nipple leading to change in size and shape

Lump in the lateral part of the left breast fixed to the overlying skin. Such lateral lumps may be missed in mammography

A hard mass in the left breast with retraction of nipple, skin involvement and retraction of overlying skin leading to change in size and shape

Clinical breast examination (CBE)

includes careful history-taking, visual inspection, palpation of both breasts, arm pits and root of the neck as well as educating women on breast self-examination and awareness, particularly on breast lumps.

History-taking should include the following: age at menarche, marital status, parity, age at first child birth, history of lactation and breast-feeding, age at menopause, family history of breast and ovarian cancers in first degree relatives (mother, sisters, aunts, grandmothers), history and duration of oral contraceptive use, hormone replacement therapy (HRT), treatment for infertility and tobacco use.

After taking history, both breasts should be visually inspected, both in the sitting and lying down positions and with arms down and up, for any of the following: swelling, lumps, changes in size and shape, skin dimpling, skin retraction, skin thickening, skin nodules, skin ulceration, the level of both nipples, retraction of either nipple, any discharge from the nipple(s), eczematous changes in the areola and nipple, swelling in the arm pit (axillae area) and root of the neck, above the collar bone (supraclavicular area).

After visual inspection, breast palpation should be done in a sitting position both with arms by one's side and raised above the head. Following this, examination is repeated in a lying down position with arms above the head. Outer quadrants followed by the inner quadrants and the nipple and subareolar region of both breasts are systematically palpated with finger tips for any discrete, hard lump. The whole breast is palpated with the palm of the hand to detect any lumps. The mobility of the lump should be assessed by asking the woman to press her hands on her hips. The arm pits and the root of the neck above the collar bone are palpated for any nodular, hard swellings.

Quick reference chart for clinical breast examination

Changes in nipple



18 Blood-stained discharge from the nipple



19 Deviated nipple with underlying hard lump under the areola of the right breast. The nipple is pulled towards the lump



20 Partially retracted nipple in the left breast due to underlying cancerous lump in the upper inner quadrant. Note the left nipple is at a higher level than the right



21 Complete retraction of the nipple due to underlying hard lump



22 Crusting and itching of the nipple due to infiltration by cancer. Palpation and mammogram revealed hard lump in the outer quadrant



23 Eczema-like rash with crusting, bleeding and itching of the nipple due to Paget's disease



24 Complete destruction and puckering of the nipple and areola due to underlying cancer



25 Eczema with complete destruction of the nipple due to a large, cancerous lump distorting the size and shape of the right breast

Changes in skin



26 Retraction of skin in the lower outer quadrant of the left breast due to underlying cancerous lump



27 Lump in the lower half of the left breast involving overlying skin and part of the areola and nipple. The skin is fixed to the lump



28 Ulcerated, fungating cancerous lump in the lower outer quadrant of the right breast



29 Note the striking change in size and shape of the right breast, with features of eczema, reddish inflamed skin, 'peau d'orange' (orange peel) appearance and a hard lump



30 Hard lump in inframammary area with involvement of overlying skin. This lump could be missed in the standing position

Inflammatory cancer



31 Diffuse hard mass occupying almost the entire right breast with reddish, inflamed overlying skin and 'peau d'orange' (orange peel) appearance with puckering of the nipple and areola



32 Red inflamed swollen left breast due to underlying inflammatory cancer



33 Thickening of the areola and 'peau d'orange' (orange peel) appearance of the skin due to underlying inflammatory carcinoma in the left breast

Any one or more of the following findings require urgent referral to a doctor:

- Discrete hard lump in the breast
- Signs which are highly suggestive of cancer such as:
 - recent nipple retraction or distortion
 - skin dimpling or retraction
 - change in size and shape of the breast
 - skin nodule
 - ulceration
 - eczema of the nipple
 - blood stained nipple discharge
 - a swelling in the armpit

If no abnormalities are discovered, women are educated on breast lumps and changes in the breast skin, areola and nipple and are advised to self examine their breasts on a monthly basis. They should consult a doctor or a trained health care worker promptly, if they ever suspect a lump or any of the above findings.

Findings in figures 7, 8, 9, 10, 19, 20, 22, 23, 26 resulted in diagnosis of early stage breast cancers.



World Health Organization - International Agency for Research on Cancer (IARC), Indian Cancer Society, Mumbai, India

International Network for Cancer Treatment and Research (INCTR)
International Union Against Cancer (UICC)

Source: A. Kurkure, E. Lucas, R. Sankaranarayanan. Breast digital atlas
<http://screening.iarc.fr>