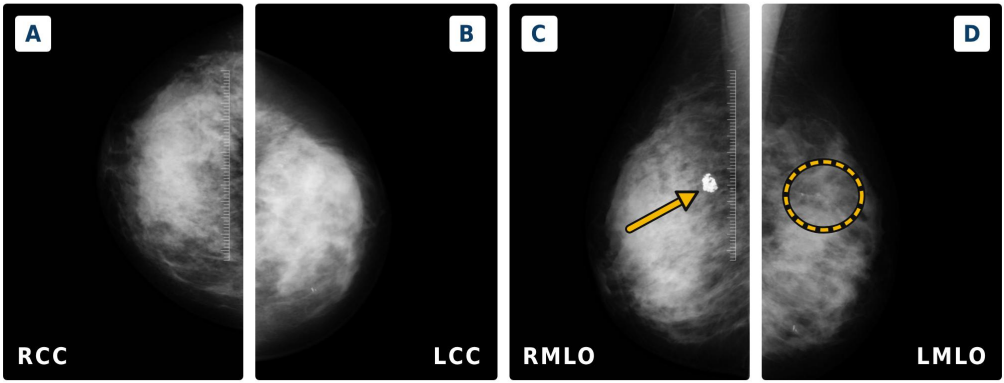
GUJARAT DIAGNOSTIC CARE PLUS
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INTERESTING CASE · CARCINOMA IN A DENSE BREAST

Subtle distortion? Chase it.

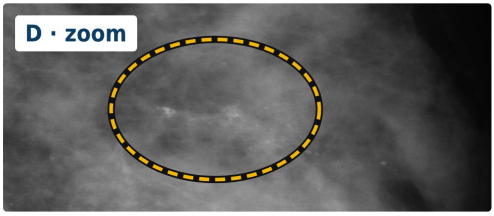
DAY 0	Woman, 37: vague left breast pain for a few weeks; nothing else.
MAMMO	Dense breasts; mild distortion + microcalcifications, left MLO (D).
USG	Same visit: irregular, stiff 7.8 mm lesion in the left UOQ (E, F overleaf).
HPE	Core biopsy : **invasive ductal carcinoma, NOS — grade III**.

MAMMOGRAPHY · 4 VIEWS



Heterogeneously dense breasts (ACR C). Left MLO (D, circle): **mild architectural distortion with microcalcifications** in the upper breast. Right (C, arrow): coarse 'popcorn' calcification — benign.

LOOK CLOSER · LEFT MLO



HUNT IN A DENSE BREAST

1. Architectural distortion
2. Fine microcalcifications
3. Focal asymmetry

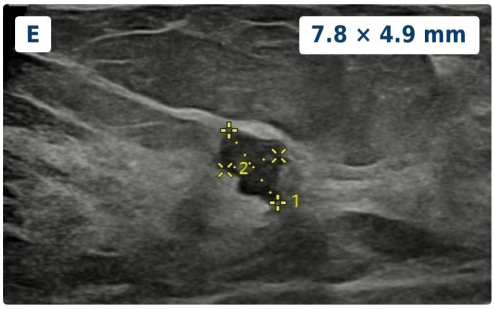
Any one → **targeted ultrasound**.

98% → 48%
mammographic sensitivity: fatty vs the densest breasts

+4.2 per 1000
cancers added by ultrasound in high-risk dense breasts — median 10 mm

ULTRASOUND · SHEAR-WAVE ELASTOGRAPHY

Same visit

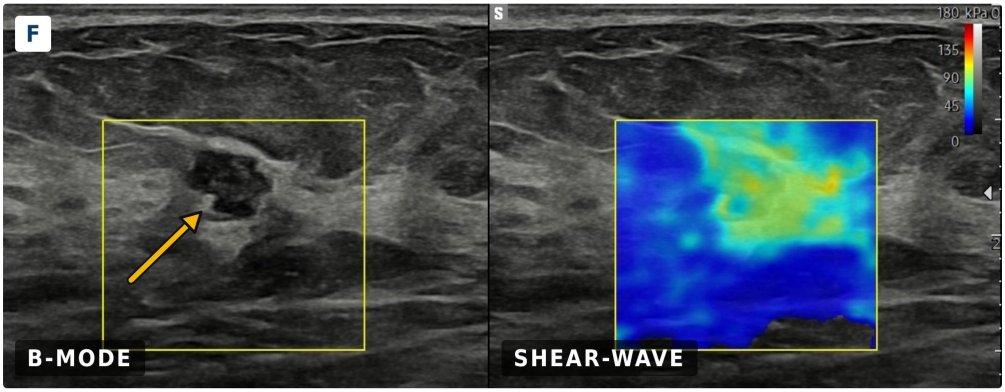


B-mode — irregular hypoechoic lesion, 7.8 × 4.9 mm (calipers), left UOQ.

WHY IT LOOKED MALIGNANT

1. **Irregular** shape
2. **Not parallel** — oblique long axis
3. **Angular** margins
4. **Stiff** on shear-wave (F)

SMALL, yet all four → **biopsy**.



Shear-wave elastography — lesion and its margin stiff (green → yellow-orange) against soft gland and fat (blue); scale 0–180 kPa.

HISTOPATHOLOGY USG-guided core biopsy · left breast

Invasive ductal carcinoma, NOS · Grade III

Dr Abhishek Agarwal, Consultant Radiologist (DNB)

TEACHING POINTS

1. **Dense breast + pain** → hunt for subtle distortion and calcifications.
2. **Distortion or calcifications** → targeted ultrasound, then biopsy.
3. **Irregular, not parallel, stiff** → biopsy, even below 1 cm.