

BREAST TOMOSYNTHESIS CLINICAL CASE: SAINT-PIERRE, OTTIGNIES, BELGIUM

Patient Information

Patient is a 51-year old woman who presents for a screening exam. She has a family history of breast cancer, with a sister diagnosed at 45 years of age. Patient is postmenopausal and is not on hormone replacement therapy. Patient reports feeling an occasional tension of the left breast. The clinical breast exam was negative, with no palpable findings.

Imaging Findings

No changes were seen compared with a prior exam. Fibro-glandular tissue is dense and abundant (BI-RADS III). It is distributed heterogeneously and nodular in different quadrants. No suspicious findings were seen on the 2D images. Review of the tomosynthesis images reveal a small architectural disorganization, stellar, sub-centimeter on which is projected in the outer part of the breast. This architectural distortion could not be found on the 2D image. An additional targeted ultrasound examination found a poorly defined mass.

Diagnosis

This small architectural disorganization only seen in tomosynthesis was confirmed by biopsy on ultrasound to be an infiltrating ductal carcinoma grade 2.

Conclusion

This case illustrates that tomosynthesis in addition to 2D has greater sensitivity than 2D alone.

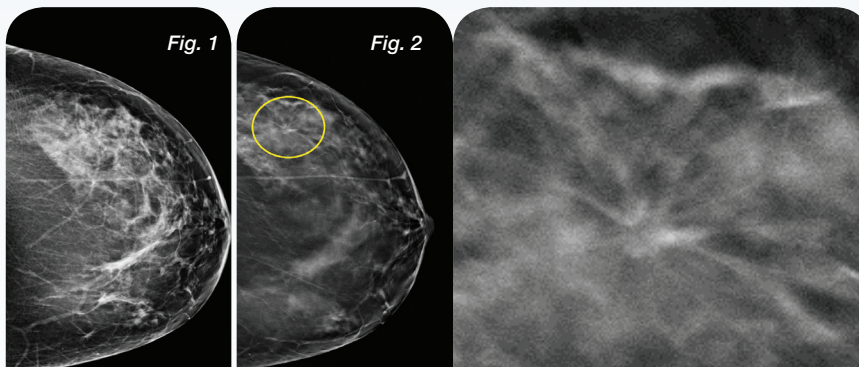


Figure 1. The 2D LCC image, read as negative
Figure 2. The 3D image clearly shows a spiculated mass in the LCC view

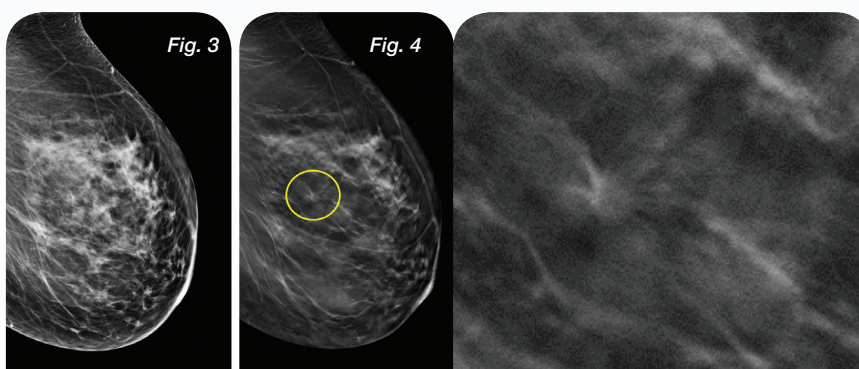


Figure 3. The 2D LMLO image, read as negative
Figure 4. The 3D image shows a spiculated mass in the LMLO view