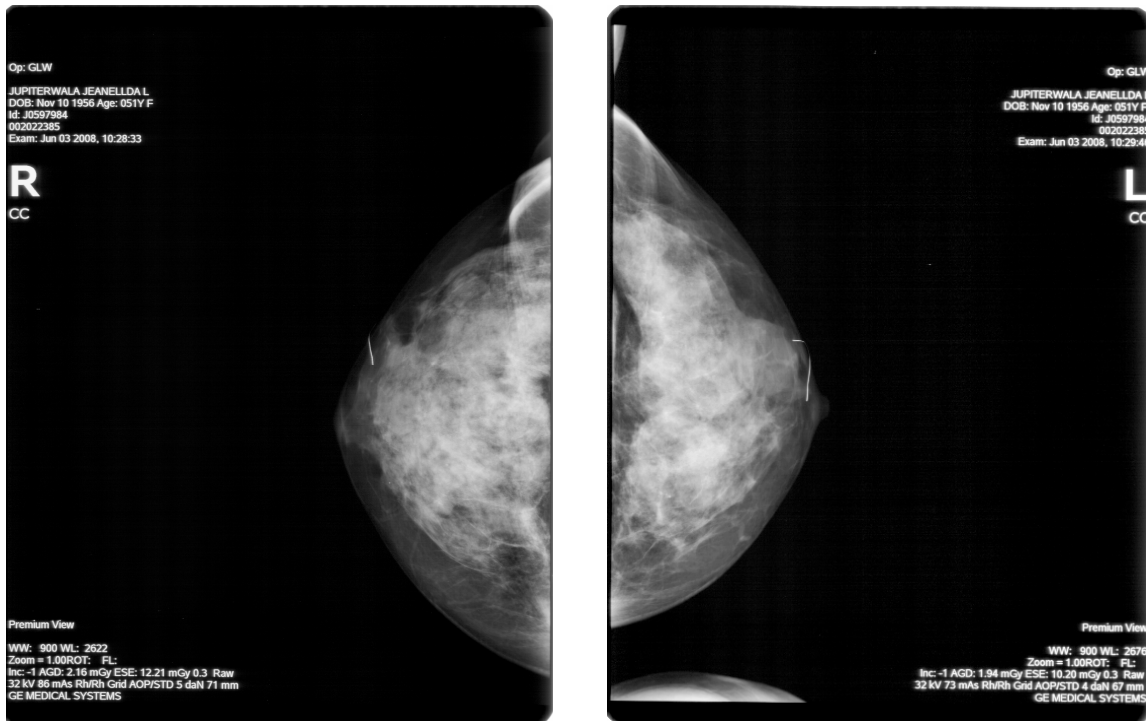


CASE STUDY

Comparison of Radiological Findings for a High Risk Dense Breast Patient (Mammography and Automated Whole Breast Ultrasound)

Patient: The Patient is a 51 year old white female with a history of dense breast tissue with fibrocystic features and large cysts requiring interventions in the past to alleviate pain and motion related discomfort.

1. DIGITAL MAMMOGRAPHY

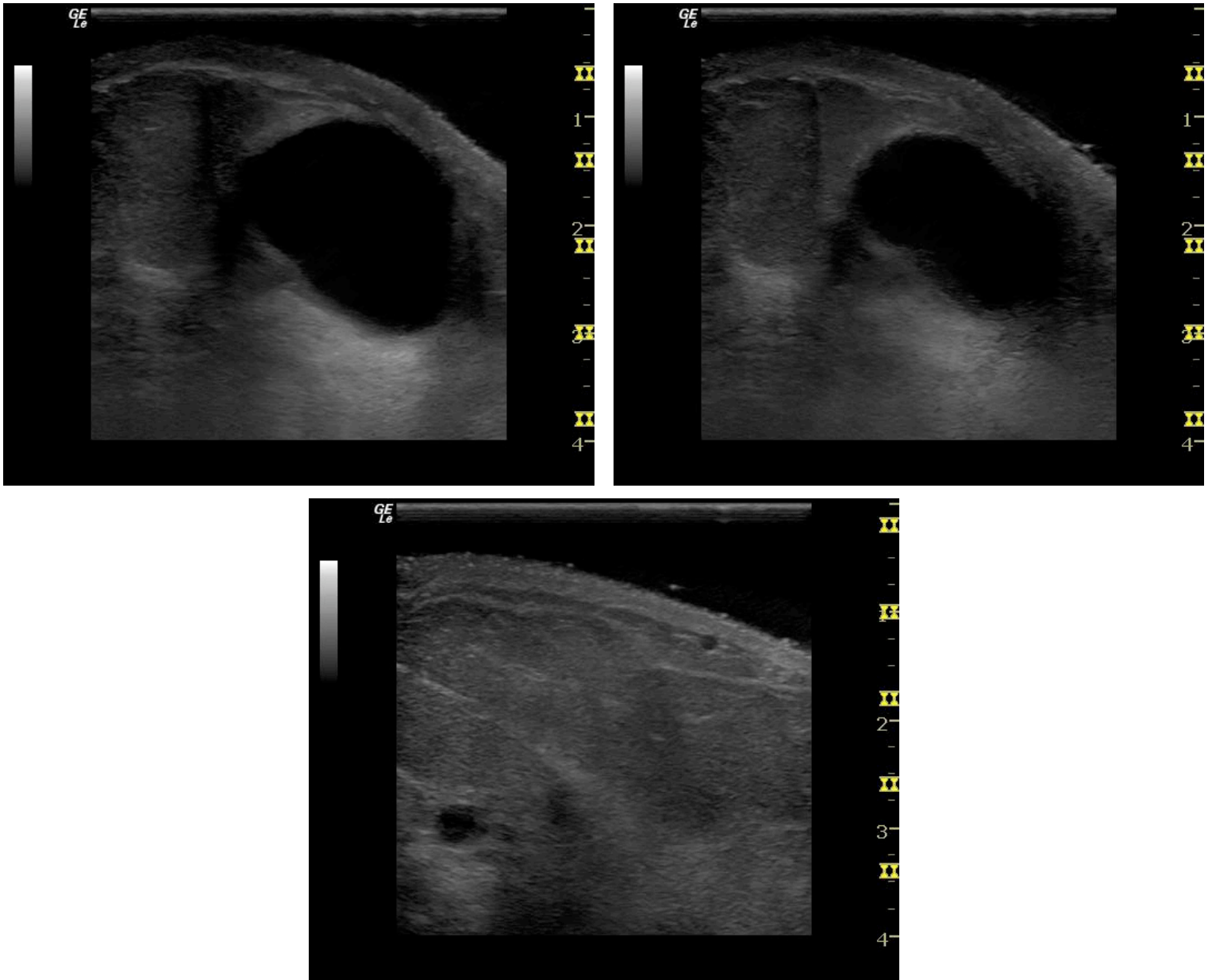


EXAM:: MAMMO SCR BILAT DIGITAL W CAD

FINDINGS: “Routine digital mammograms were performed bilaterally and compared to the prior study. The breast parenchyma is extremely dense which greatly lowers the sensitivity of mammography. No suspicious calcifications are seen within either breast. R2 CAD was utilized in the interpretation of this exam. Layering calcifications in the left breast consistent with milk of calcium is noted. The breast tissue is not only incredibly dense it is very nodular”.

IMPRESSION: “1. There is no mammographic evidence of malignancy in either breast.
2. Annual routine mammograms are recommended.
3. A negative mammogram report should not deter further clinical evaluation if a dominant mass or a clinically suspicious area exists”.

2. AUTOMATED WHOLE BREAST ULTRASOUND



EXAM: AUTOMATED BILATERAL WHOLE BREAST ULTRASOUND (Sofia™ System¹)

FINDINGS: Automated whole breast ultrasound exams were performed bilaterally. The breast parenchyma is extremely dense which did not prevent the visualization of breast tissue during the automated ultrasound procedure. Numerous cystic lesions and general fibrocystic changes are observed bilaterally. A large 3cm fluid filled cyst is observed in the left breast with regular margins and posterior enhancement. This cyst is palpable on physical exam and is the cause of significant pain for the patient. Cystic lesions bilaterally range in size from .25 cm to 3cm. Milk ducts are observed superficially. The breast tissue exhibits considerable density and nodularity bilaterally.

- IMPRESSION:**
1. Intervention to remove fluid from the large 3cm cyst in the left breast should be considered to alleviate pain and discomfort.
 2. Repeat automated whole breast ultrasound within six months for temporal comparisons of areas of interest.
 2. There is no ultrasound evidence of malignancy in either breast.

1. The Sofia™ Automated Whole Breast Ultrasound System from iVu Imaging Corporation was used to acquire the ultrasound images in this study. The Sofia™ system acquires 180 images per breast automatically during an automated scan of 360°. The scan time per breast is approximately Three (3) minutes.