Case 1: Invasive Ductal Carcinoma, Grade II-III

Patient Age: 56 years

Clinical Findings: None

Mammography: Screening mammography in the right breast reveals Tabar type 3 pattern near the nipple in the upper outer quadrant. A small nodule is seen (also in compressed view)

Ultrasound: Ultrasound shows two hypoechoic lesions, one 14mm in size, near the nipple, and a 5mm second lesion in the upper outer quadrant.

CTLM: Angiogenesis is seen centrally and extending into the lower outer quadrant of the right breast

Pathology: Invasive Ductal Carcinoma, Grade II-III

IDSI Comment: The lesions are very difficult to see on the Mammogram. Ultrasound confirms their presence but does not tell us if they are benign or malignant. CTLM is uniquely able to tell us that they are malignant.

Case 2: Infiltrating Ductal Carcinoma

Patient Age: 62 years

Clinical Findings: None

Mammography: Mammography of the left breast reveals a 19x10mm lesion at 9 o’clock posteriorly classified as BIRADS 5

Ultrasound: Ultrasound confirms a hypoechoic lesion 19x10mm, infiltrating the fascia of the pectoral muscle.

CTLM: Demonstrates extensive angiogenesis at 9 o’clock posteriorly

Pathology: Infiltrating Ductal Carcinoma, grade II, positive estrogen and progesterone receptors.

IDSI Comments: CTLM is not recommended for BIRAD5 lesions, but the case is valuable to demonstrate the usual finding that the volume of angiogenesis is much larger than the tumor. As a result, even tumors close to the chest wall are easily seen on CTLM.

Case 3

Patient Age: 62 years

Clinical Findings: Skin indentation at the border of the outer upper quadrant

Mammography: Mammography of the left breast, Tabar type 3, shows a nodule 15x15mm in the upper outer quadrant.

Ultrasound: Ultrasound revealed acoustic shadowing in the area of skin involvement, exact size was not possible to measure, suspicious for malignancy.

CTLM: CTLM of the left breast area shows angiogenesis on 3 o’clock position.

Pathology: Invasive Lobular Carcinoma

IDSI Comment: The CTLM confirms that the lesion seen on mammography and ultrasound is malignant. The angiogenesis manifests a classic “free standing” spherical configuration.