Case 1 Infiltrating Ductal Carcinoma  IDC

Patient Age: 60 years

Clinical Findings: None

Mammography: Mammography of the right breast shows fibrocystic changes, and there is an area of dense tissue, 1.3 cm in diameter, in the upper inner quadrant. It is very difficult to be certain the dense mass is malignant

Ultrasound: Ultrasound reveals an indeterminate mass 1.0 x 1.1 cm in the upper inner quadrant

CTLM: FTB shows extensive angiogenesis in the upper inner quadrant

Pathology: Infiltrating Ductal Carcinoma (IDC) and hyperplasia

IDS1 Comment: The extent and intensity of the angiogenesis suggest there is a very aggressive lesion. Window and level values were adjusted to reduce normal anatomy signals, permitting the angiogenesis to be very clearly demonstrated.

Case 1 Cystosarcoma Phyllodes

Patient Age: 60 years

Clinical Findings: Palpable, right retroareolar mass, with rapid growth in 1 year. No skin or lymph nodes involvement; no previous MX or US. Patient has no family history of breast cancer.

Mammography: Large (6-cm), round, high density mass is seen, with predominantly well-defined margins, no associated calcifications, no evidence of additional masses, no skin thickening is identified

Ultrasound: A complex mass, with anechoic portions, septae and mural nodularity is seen. Enhancement is noted deep to the lesion; no architectural distortion, no overlying skin thickening, bilateral normal size and appearance of lymph nodes.

Doppler US: Doppler US interrogation demonstrates flow within the mural nodularity of the mass

MRI: MRI reveals a round mass, with irregular peripheral and nodular enhancement, no other suspicious enhancing foci.

CTLM: CTLM reveals high light absorption in the area of mural nodes. No light absorption in the cyst area.

Pathology: Cystosarcoma Phyllodes

IDS1 Comment: The CTLM study reveals particularly well that this huge mass has virtually no vascularity in its center but has a peripheral “shell” of angiogenesis thicker superiorly. Most large tumors will show this “rim angiogenesis. As the tumor outgrows the angiogenic vessels, the center usually becomes necrotic. Virtually all breast tumors over 1.5 cm in size are necrotic in the center.”