

BACKGROUND

- Breast cancer in female is the leading cause of death in females worldwide. Male breast cancer is such a rare condition that it constitutes 1% of all breast cancer worldwide.¹
- In a study of males with primary breast cancer 71% were non-Hispanic male, 11% Hispanic male, 7% Black male. The study also showed that 82% had hormone receptor-positive, 15% HER-2 positive, and 4% triple-negative. HER-2 positive was seen in younger males.²
- Diagnosis is made late, usually males present with advance disease, 88% of cases present in Stage III and IV.³ This is thought to be due lack of awareness among the population in regards to male breast cancer.

CASE PRESENTATION

- We present a case of a 57-year-old Caucasian male with a medical history of gastritis and COPD with a 30 Pack-Year smoking history who presented to the emergency room with complaints of non-exertional intermittent chest pain that has been on going for almost 1.5 years. He had multiple ER visits for this complaint and was diagnosed with costochondritis each visit. A previous cardiac workup was negative.

PERTINENT EXAM FINDINGS

- General appearance patient looks chronically ill appearing. Gynecomastia is observed bilateral. A tender, firm and mobile asymmetrical mass is palpated in the left breast, mass measured 4 cm x 4 cm. Dimpling noted at the superior medial edge of the left areola. No nipple discharge was expressed. Blood work included Tumor marker HCG 2, Estradiol (E2) level 39.2, Elevated LH of 30.5, Prolactin 6.9, Testosterone level 512.9

IMAGING RESULTS

- CT Chest was consistent with gynecomastia and a L breast mass.
- Breast Ultrasound confirmed a 3.3 cm x 1.9 cm mass, suspicious for malignancy

MANAGEMENT

- Ultrasound guided biopsy was conducted. The pathological diagnosis was Invasive Ductal Carcinoma. The mass was Estrogen Receptor positive (90%), Progesterone Receptor positive (1%) and HER-2/Neu Negative.
- The patient was discharged to follow-up with Surgery for mastectomy and Oncology for BRCA testing, chemotherapy and hormonal therapy.

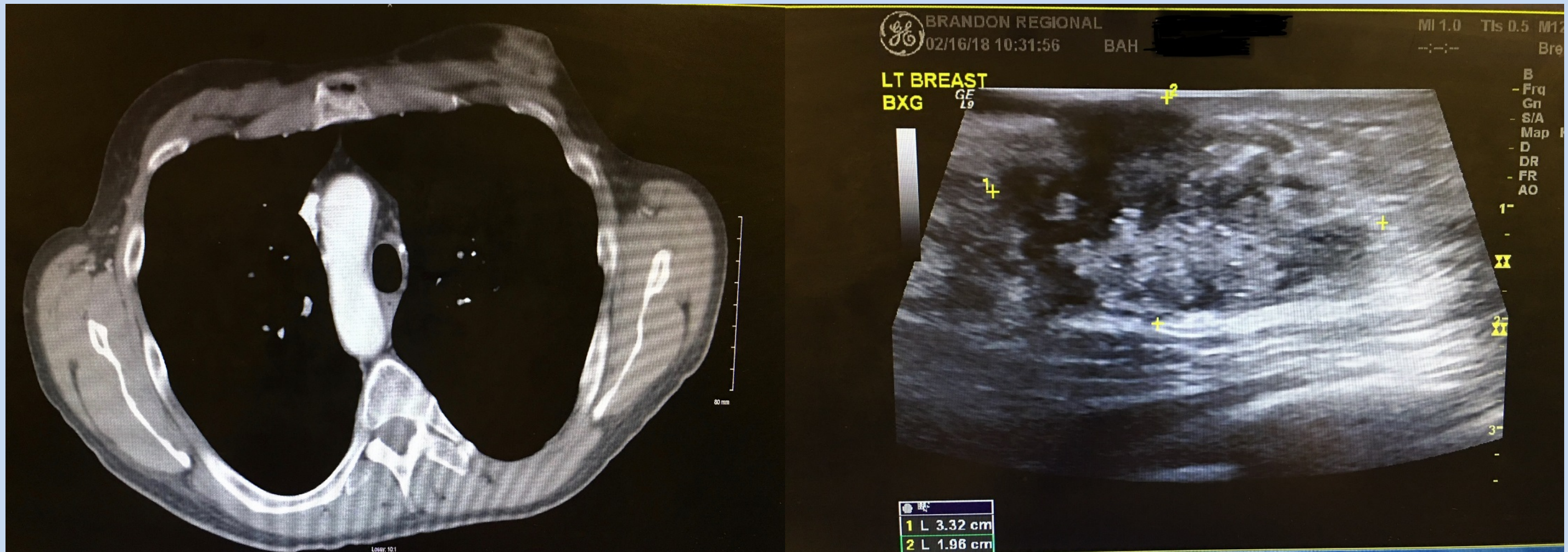


Figure 1: CT Chest with contrast showing left breast cancer

Figure 2: Ultrasound Left breast mass

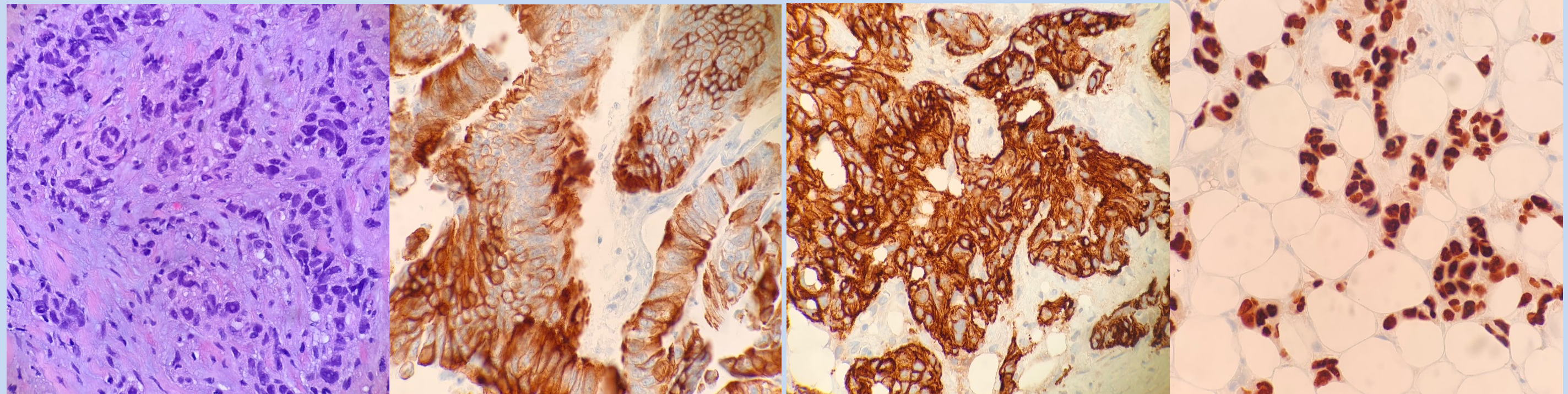


Figure 3: High magnification H&E Stain of invasive ductal carcinoma, infiltrating through the stroma and fat, poorly differentiated

DISCUSSION

- Breast cancer is usually a diagnosis far more common in females, with the incidence being 1 in 8 in female and 1 in 1,000 in male.
- Invasive ductal carcinoma is seen more in men with breast cancer (90%) when compared to females with breast cancer (70-80%).

DISCUSSION CONTINUE

- It is very important to know that risks factors for male breast cancer seems to be similar risk factors as for female breast cancer such as older age, high estrogen levels, radiation exposure, genetics and family history.
- Liver disease can cause a reduction in male hormones leading to an increased female hormones therefore increasing men risk factor to develop breast cancer. Testicle disease or surgery such as orchitis or orchiectomy can increase males risk for breast cancer.
- One unique condition that increases a male risks for breast cancer is Klinefelter syndrome which is an inherited condition.
- BRCA 1 and BRCA 2 are inherited mutations that increases the risk of breast cancer in men. BRCA 2 appears to increase the risk the of breast cancer in men more than BRCA 1. Males with BRCA 2 mutation have an estimated 6% lifetime absolute risk of breast cancer.⁶
- Diagnostic evaluation and staging is similar in males as it is for females. However, management is where one difference is seen when compared to females. Males with hormone receptor-positive breast cancer, Tamoxifen is prefer over aromatase inhibitor due to better five-year survival rate.
- A social stigmata exists that males cannot present with diseases of the breast, since it is assumed that men do not have breasts. However, it is important to note that hormonal changes in men leading to alteration in estrogen and androgen ratio can stimulate breast cell growth.
- Male breast cancer is such a rare disease that physician do not consider it as a differential diagnosis in patient coming in with chest pain, we strongly urge that male patients presenting with atypical chest pain, should have a physical exam for breast mass as there may have an underlying breast pathology.