

## Introduction

- Less than 0.25% of all breast cancers are male breast cancer
- Average age at diagnosis: 67-years-old (5-10 years later than female patients)
- Delayed care leads to delayed diagnosis and worse prognosis and outcome.

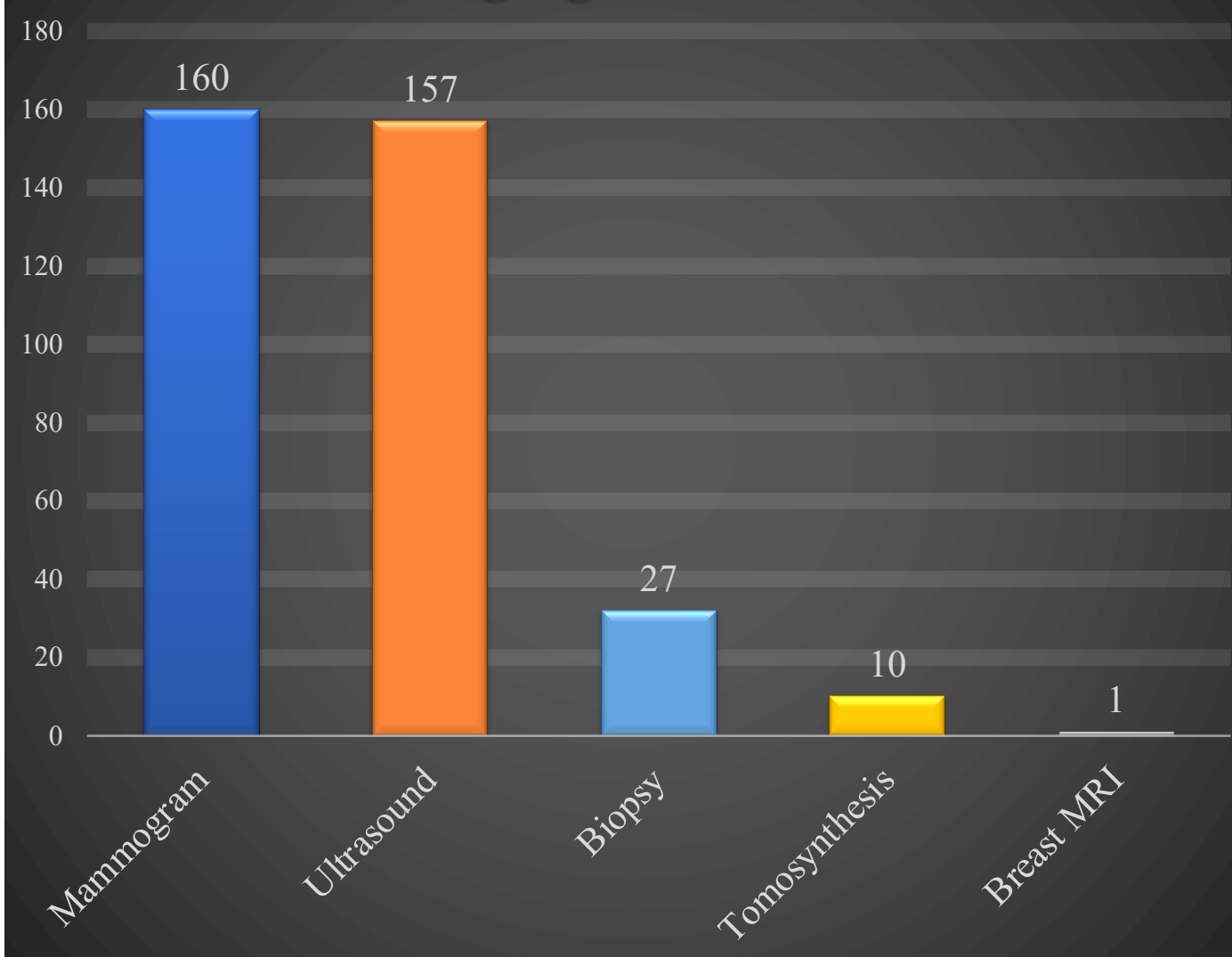
## Purpose

The purpose of this study was to identify and correlate the radiological and pathological findings of male breast masses in the Texas Tech El Paso community over the last ten years, from 2013 to 2023.

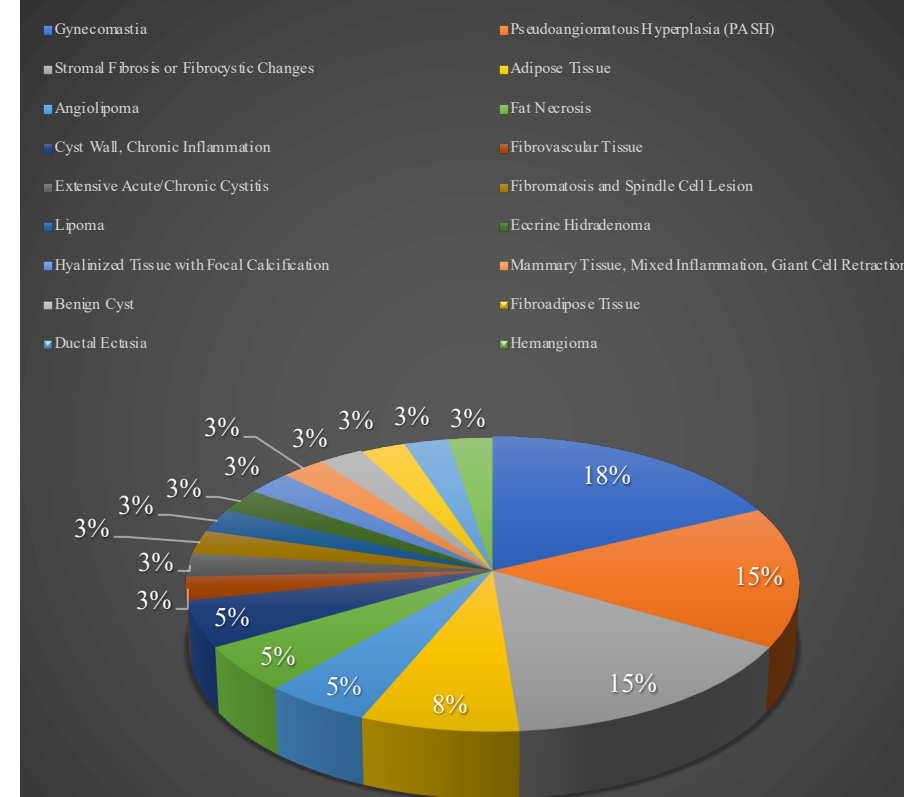
## Methods

We did a retrospective chart review of mammograms, breast ultrasounds, histopathology reports and diagnoses on 213 male patients aged 18 and above at University Medical Center in El Paso, TX.

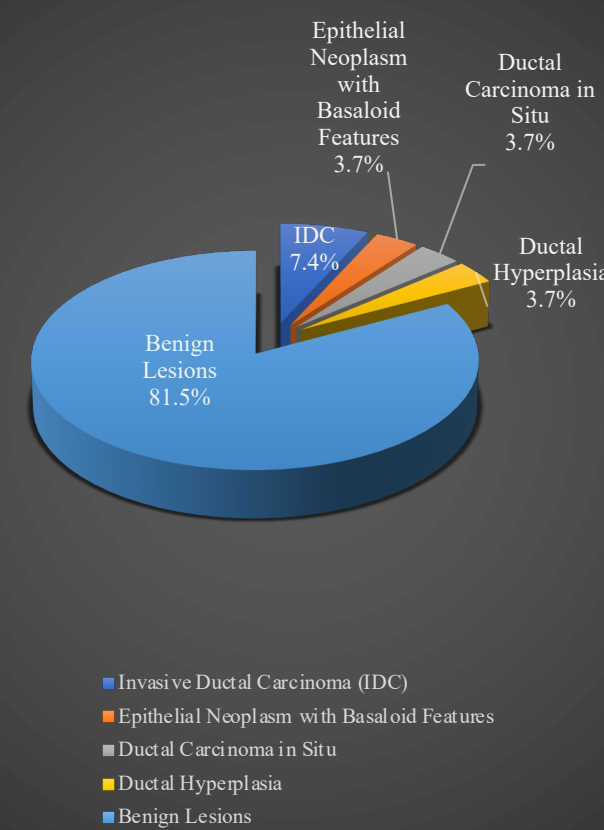
## Breast Imaging for Male Patients



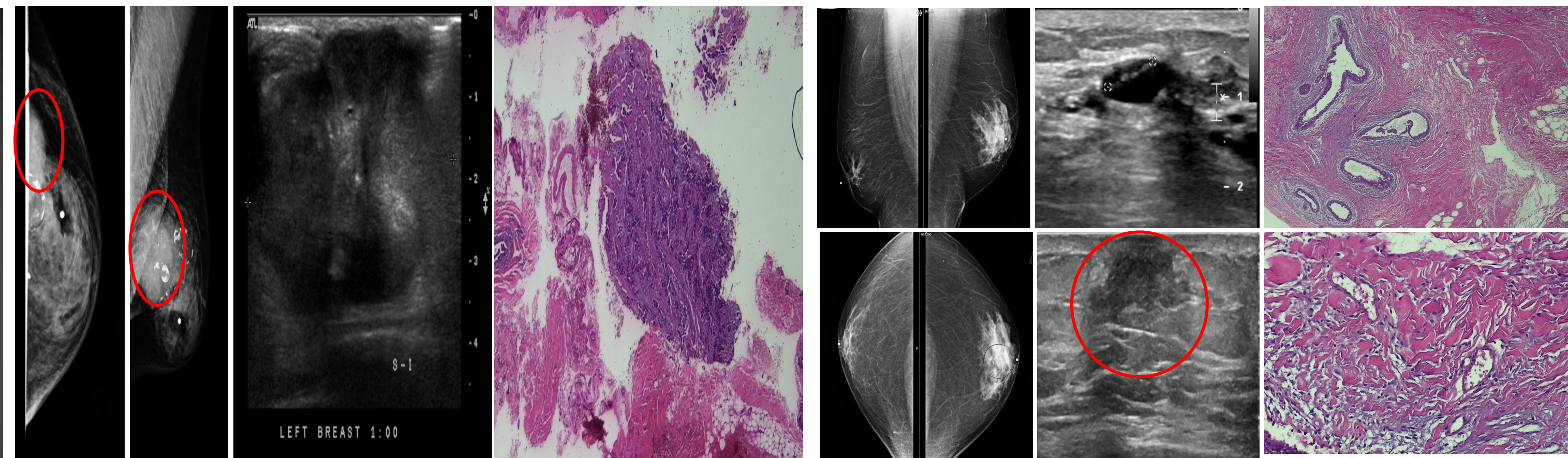
## Benign Findings on Pathologic Diagnosis



## Total Male Breast Biopsy Results

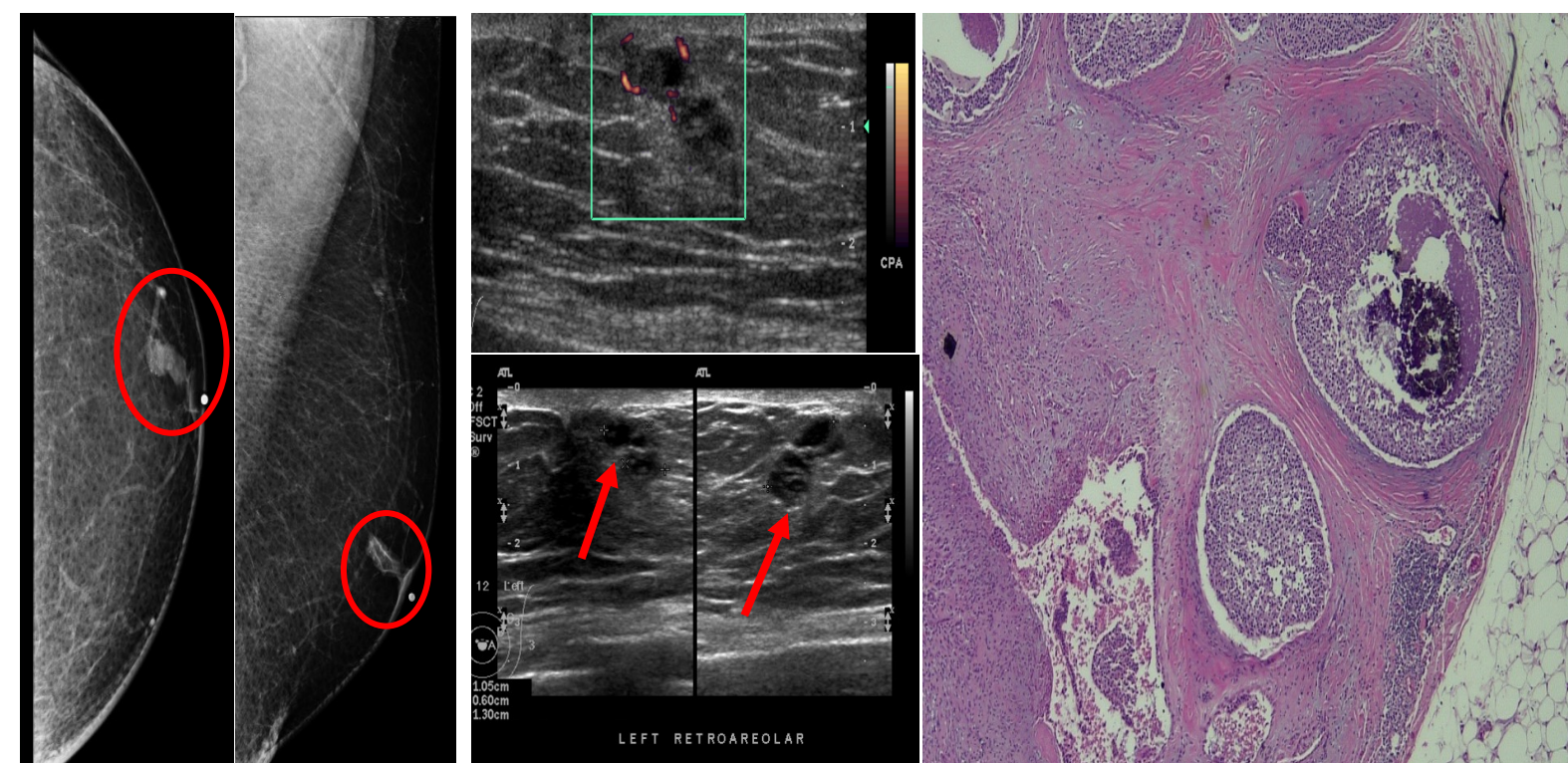


## Findings

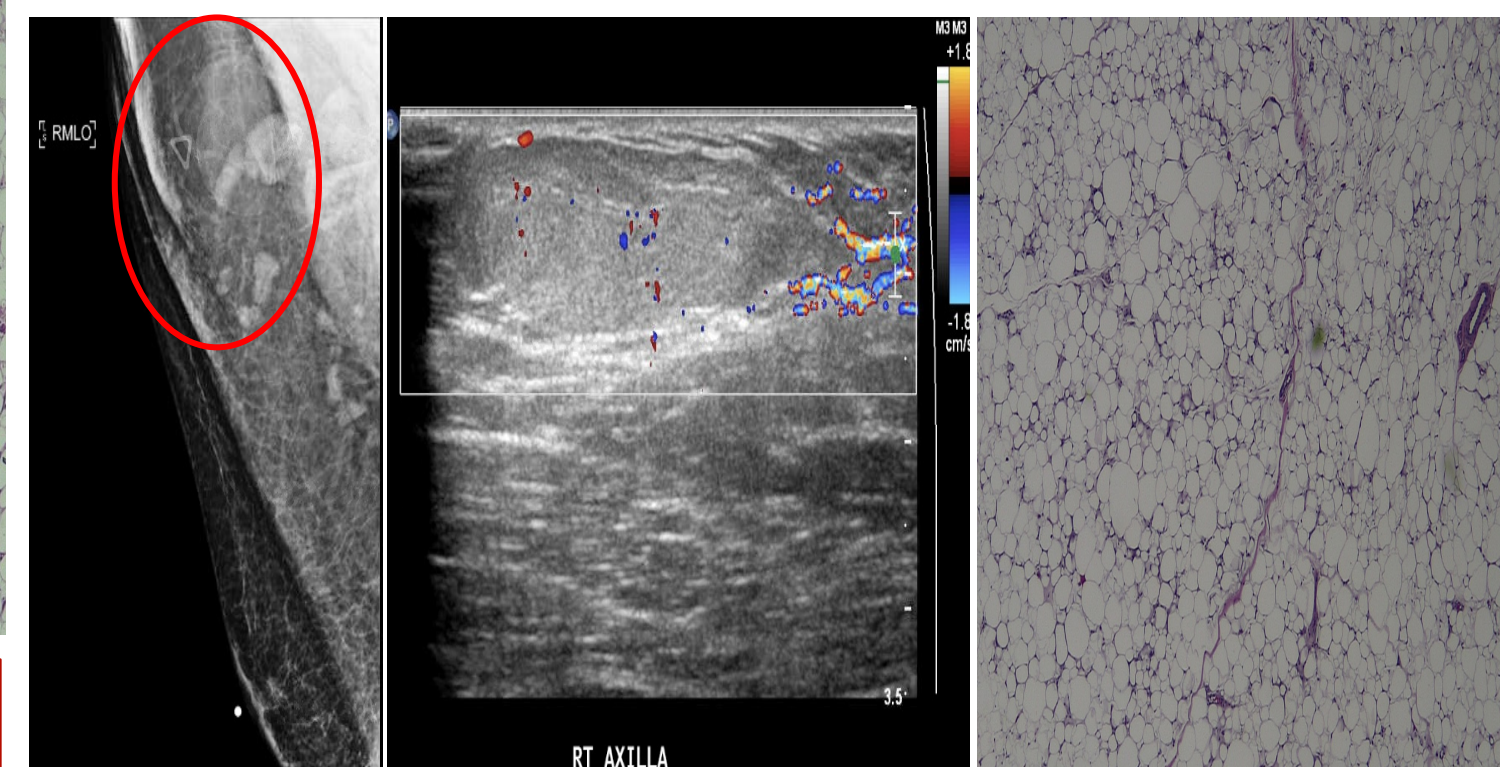


59-year-old male with PMH of Parkinson's disease and hypothyroidism presenting with a palpable lump in the left breast. Mammogram showed a **focal asymmetry with coarse heterogenous calcifications** in the upper outer quadrant of the left breast. On US, there was an irregular mass with coarse calcifications in the upper outer quadrant of the left breast. Histology shows groups of cells forming glands or individual cells invading into the stroma creating a background desmoplastic reaction; consistent with **INVASIVE DUCTAL CARCINOMA**.

Bilateral CC and MLO views show enlargement of both breast. There is moderate to severe left and mild right flame shaped fibroglandular tissue in the retroareolar area which radiates from the nipple into the posterior adipose tissue. In addition, there is a focal asymmetry in left retroareolar breast which corresponds to ductal ectasia on US. **Irregular flame shaped hypoechoic area in the right retroareolar region is consistent with the sonographic appearance of gynecomastia**. Histology shows increased periductal chronic inflammation and fibrosis, luminal hyperplasia with pseudo papillary projections consistent with **GYNECOMASTIA**. There are also stromal slit like spaces lined by cells, that resemble vascular spaces indicative of **P.A.S.H. (PSEUDOANGIOMATOUS STROMAL HYPERPLASIA)**.



86-year-old male with PMH DM, HTN, DLD, thrombocytopenia, presenting for palpable lump in left breast. CC and MLO mammographic views of the LT breast show a **high density mass** with associated microcalcifications in the left subareolar region. Ultrasound (US) shows a 13 mm x 11 mm x 6 mm complex cystic and solid mass in left subareolar region with internal vascularity as noted on color Doppler image. Histology showed expanded ducts with monotypic cells with high grade atypia (large, dark nuclei, mitosis) necrosis and calcifications; consistent with **DUCTAL CARCINOMA IN SITU, SOLID, CRIBRIFORM, MICROPAPILLARY AND COMEDOCARCINOMA TYPE**.



31-year-old male who complained of a right axillary mass. MLO view of the right breast showed a **well-circumscribed fat density mass** in the right axilla corresponding to the palpable abnormality. US of the right axilla in the patient's palpable area of concern shows an isoechoic soft tissue mass. Pathology shows a well defined or encapsulated lesion composed of mature adipocytes, no cytologic atypia, fat necrosis, consistent with **BENIGN MATURE ADIPOSE TISSUE/ LIPOMA**.

## Conclusion

- 81.5% of patients exhibited benign pathology, while 18.5% presented with malignant, high risk, or metastatic pathology.
- Male breast cancer, though uncommon, is present in our community.
- Early detection and understanding of variations in male breast masses are critical.
- Our study highlights the need for increased awareness and clinical suspicion of male breast cancer.
- Early detection through imaging and understanding the etiology of male breast mass symptoms can improve outcomes.