

**CASE 2**

**40 Y/O WOMAN**

# Brief history

- **Past history**

Denied

- **Chief complain**

A firm mobile left breast lump with mild erythema noted in recent one month

# Imaging studies

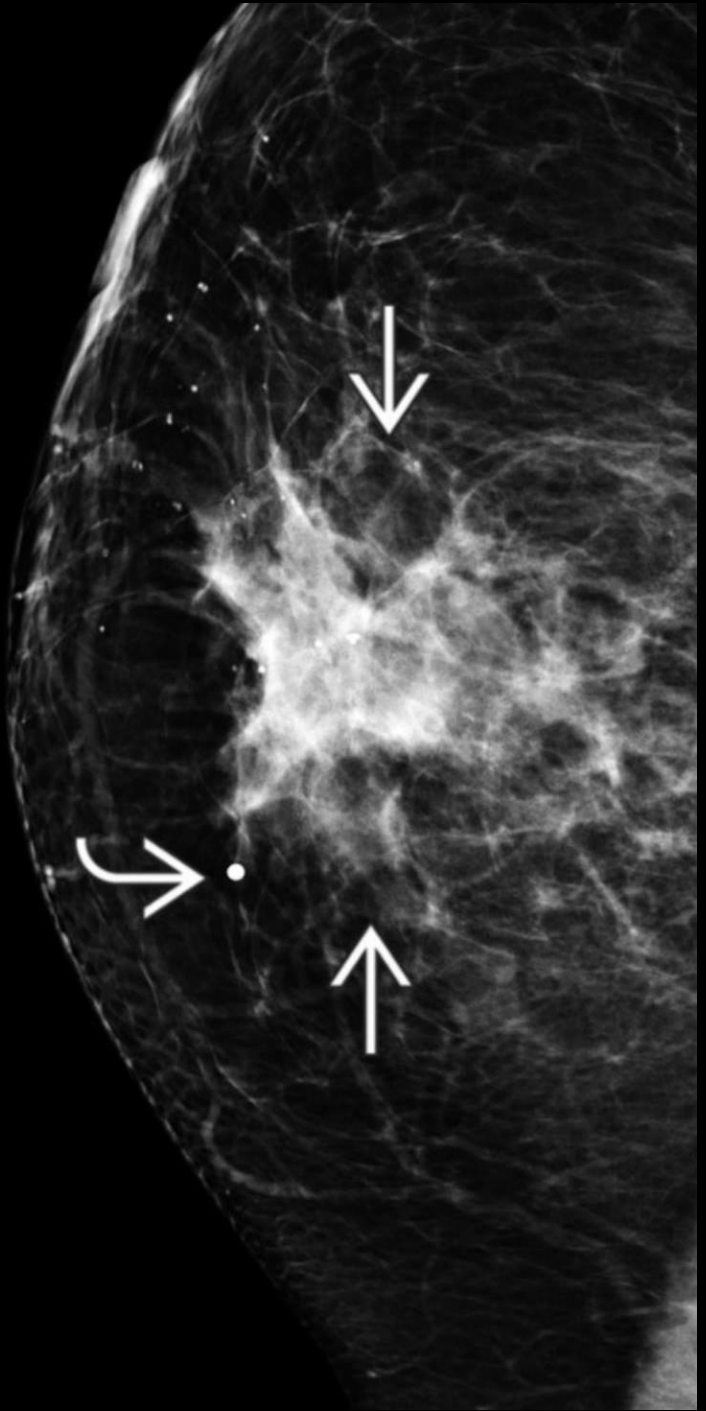
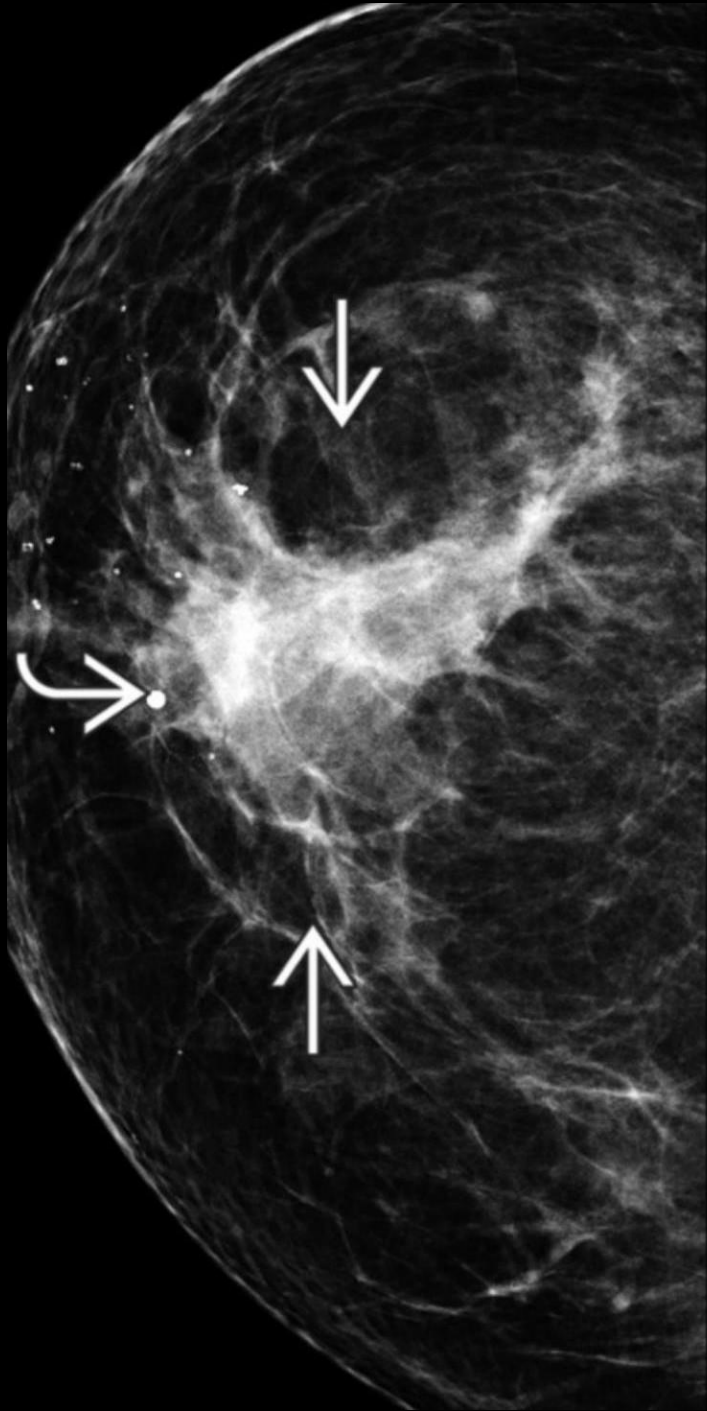
**Digital mammography (2021.01.11)**

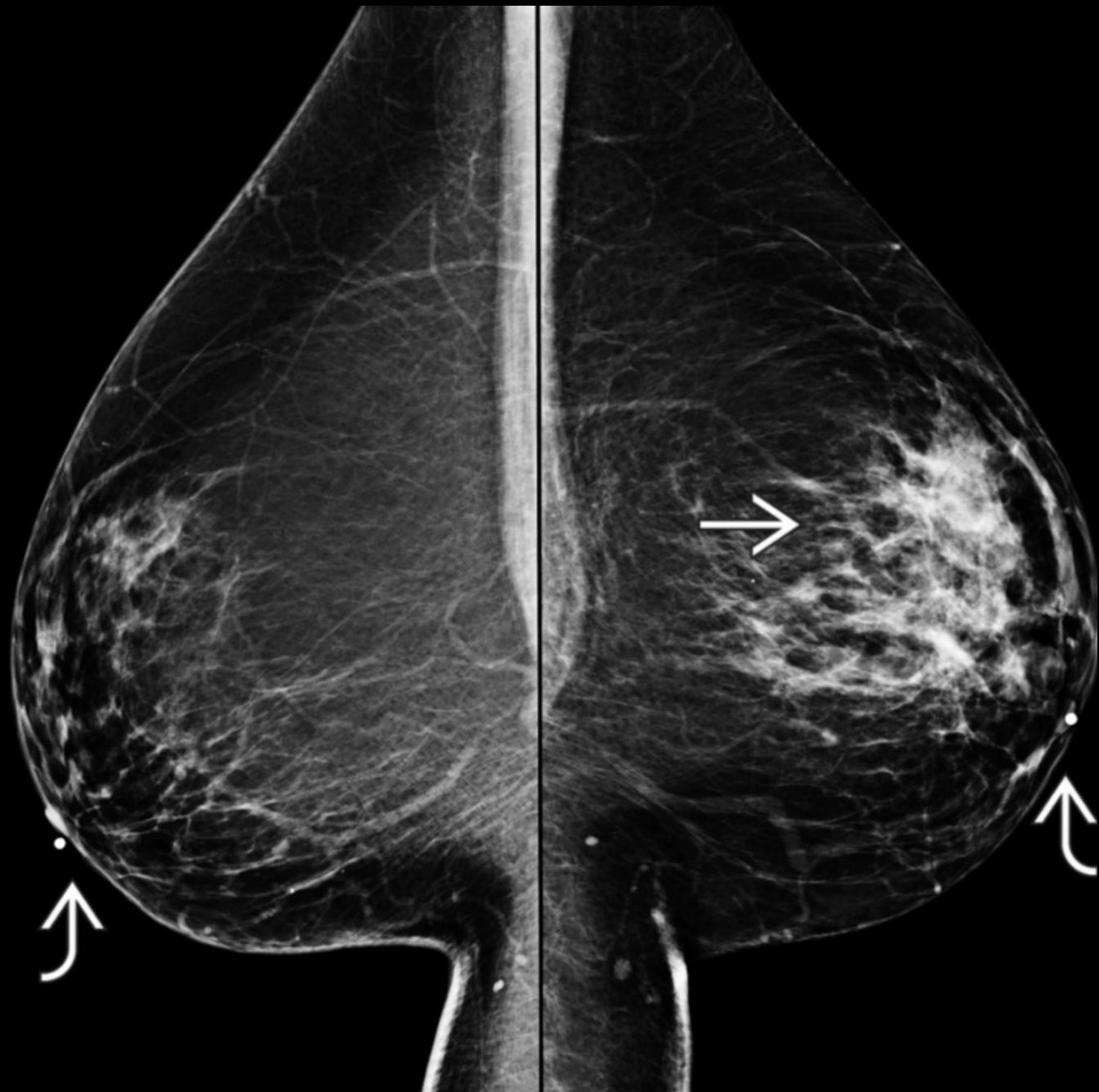
# Imaging findings

- ✓ **Focal asymmetric density** in 9 o'clock direction of the left breast
- ✓ **Grouped amorphous microcalcifications** in UOQ of the left breast (**BIRADS 0**)
  - grouped pleomorphic calcifications (**BIRADS 4A**)
  - Core needle biopsy (9.5/2)  
**Granulomatous mastitis (BIRADS 3)**

# Granulomatous mastitis

- a.k.a. **idiopathic granulomatous mastitis**
- **Non-infective inflammatory condition of breast**, characterized by **lobulocentric, noncaseating granulomas**
- Usually **childbearing, late teens to 40s**; typically **post partum**, **Breastfeeding** history very common
- Nulliparous women: **Hyperprolactinemia** or **blunt trauma**
- Idiopathic, **probable autoimmune etiology**
- **Diagnosis of exclusion**, especially cancer or tuberculosis
- Benign prognosis, but **high rate of recurrence (16-50%)**





	<b>XR</b>	<b>US</b>	<b>MRI</b>
<b>Granulomatous mastitis</b>	<ul style="list-style-type: none"> <li>- Heterogeneous or extremely dense parenchyma</li> <li>- Asymmetry or irregular masses</li> <li>- Skin thickening</li> <li>- Axillary adenopathy</li> <li>- Calcifications are rare</li> </ul>	<ul style="list-style-type: none"> <li>- Irregular hypoechoic mass usually with hypoechoic tubular extensions</li> <li>- Perilesional echogenicity</li> <li>- Vascularity of surrounding tissues</li> <li>- Fistula formation</li> <li>- Skin thickening</li> </ul>	<ul style="list-style-type: none"> <li>- Heterogeneous segmental T1 hypointense, T2 hyperintense signal</li> <li>- Non-masslike enhancement on postcontrast dynamic T1-weighted</li> <li>-Heterogeneously enhancing irregular lesions with gradual enhancement without washout</li> <li>-Skin thickening and nipple retraction</li> </ul>
<b>Acute Mastitis/Abscess</b>	<ul style="list-style-type: none"> <li>- Asymmetric density, mass, or distortion</li> <li>- Calcifications are rare</li> <li>- Skin and trabecular thickening</li> <li>- Axillary adenopathy</li> </ul>	<ul style="list-style-type: none"> <li>- Increased parenchymal echogenicity</li> <li>- Multiloculated, nonvascular, hypoechoic fluid collections</li> <li>- Skin thickening</li> </ul>	<ul style="list-style-type: none"> <li>- Heterogeneous T2 signal correlating with parenchymal edema</li> <li>- Rim-enhancing irregular mass</li> <li>- Skin and trabecular thickening</li> </ul>
<b>Inflammatory breast cancer</b>	<ul style="list-style-type: none"> <li>- Skin and trabecular thickening</li> <li>- Global asymmetry</li> <li>- Axillary adenopathy</li> <li>- Less commonly multiple masses, calcifications or architectural distortion</li> </ul>	<ul style="list-style-type: none"> <li>- Increased parenchymal echogenicity</li> <li>- Increased diffuse vascularity</li> <li>- Skin thickening</li> <li>- Dilated lymphatics</li> </ul>	<ul style="list-style-type: none"> <li>- Streaky T2 signal correlating with parenchymal edema</li> <li>- Rapid enhancement with delayed washout; enhancing irregular masses, non-masslike enhancement or reticular/dendritic enhancement</li> <li>- Skin thickening and enhancement</li> </ul>
<b>Invasive breast carcinoma</b>	<ul style="list-style-type: none"> <li>- Irregular mass with spiculated or indistinct margins</li> <li>- Architectural distortion</li> <li>- May have calcifications</li> <li>- Axillary adenopathy</li> </ul>	<ul style="list-style-type: none"> <li>- Irregular, hypoechoic vascular mass with indistinct, angular or spiculated margins</li> <li>- Perilesional echogenicity</li> </ul>	<ul style="list-style-type: none"> <li>- Irregular enhancing mass or segmental area of non-masslike enhancement, which demonstrates early washout kinetics (Type 3)</li> </ul>