

RADY 413 Case Presentation

Julia Whitley MS4
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Edited by John Lilly, MD



SCHOOL OF MEDICINE
Radiology

54-year-old man presents with right axillary
lymphadenopathy

Patient history and physical exam

54-year-old man with no significant past medical history presents to his primary care physician for 6 months of daily fevers, night sweats, and a 50-pound unintentional weight loss. He has also noted right axillary swelling that has increased over the past few months. He has had no recent international travel or exposure to sick individuals. Physical exam is notable for a >5 cm fixed mass in the right axilla with irregular borders. The mass is not tender to palpation, there is no associated skin discoloration, and no masses are palpated in the left axilla.

Differential diagnosis: axillary lymphadenopathy

UNILATERAL

- Reactive lymphadenopathy
- Mastitis
- Malignancy
 - Lymphoma
 - Axillary spread of breast cancer

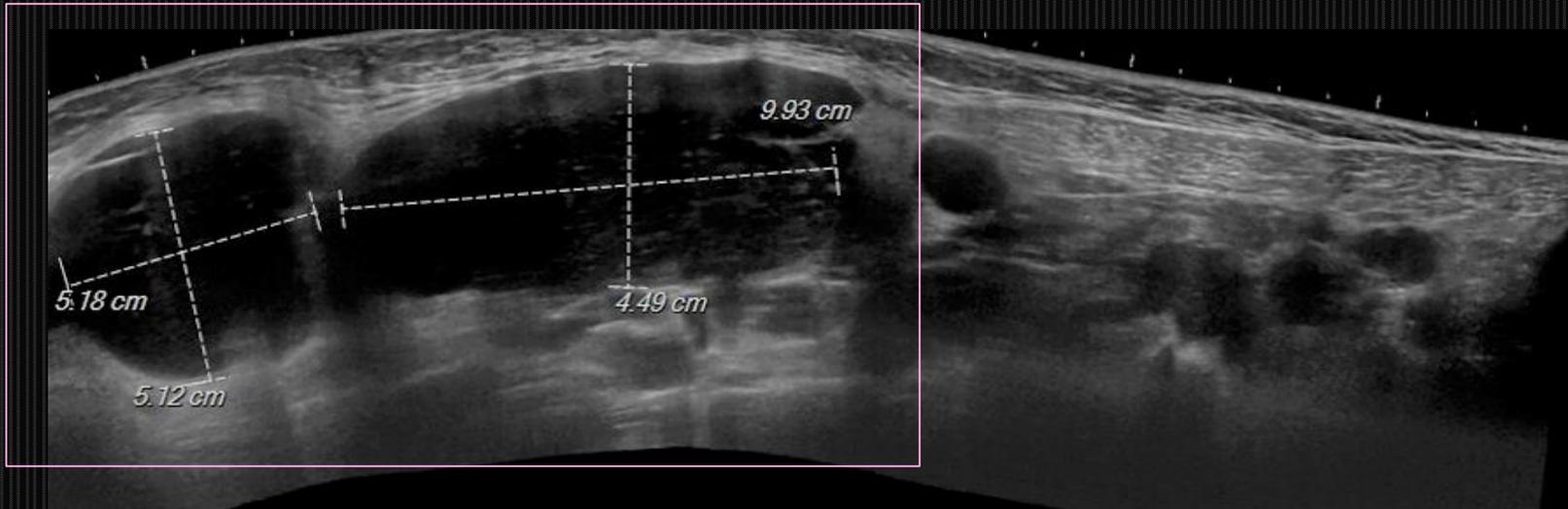
BILATERAL

- Disseminated infection
- HIV
- Autoimmune disorders (i.e. rheumatoid arthritis)
- Collagen vascular disease
- Malignancy
 - Lymphoma
 - Leukemia
 - Metastatic cancer

Imaging studies

- Targeted ultrasound of bilateral axilla
- Bilateral diagnostic mammogram

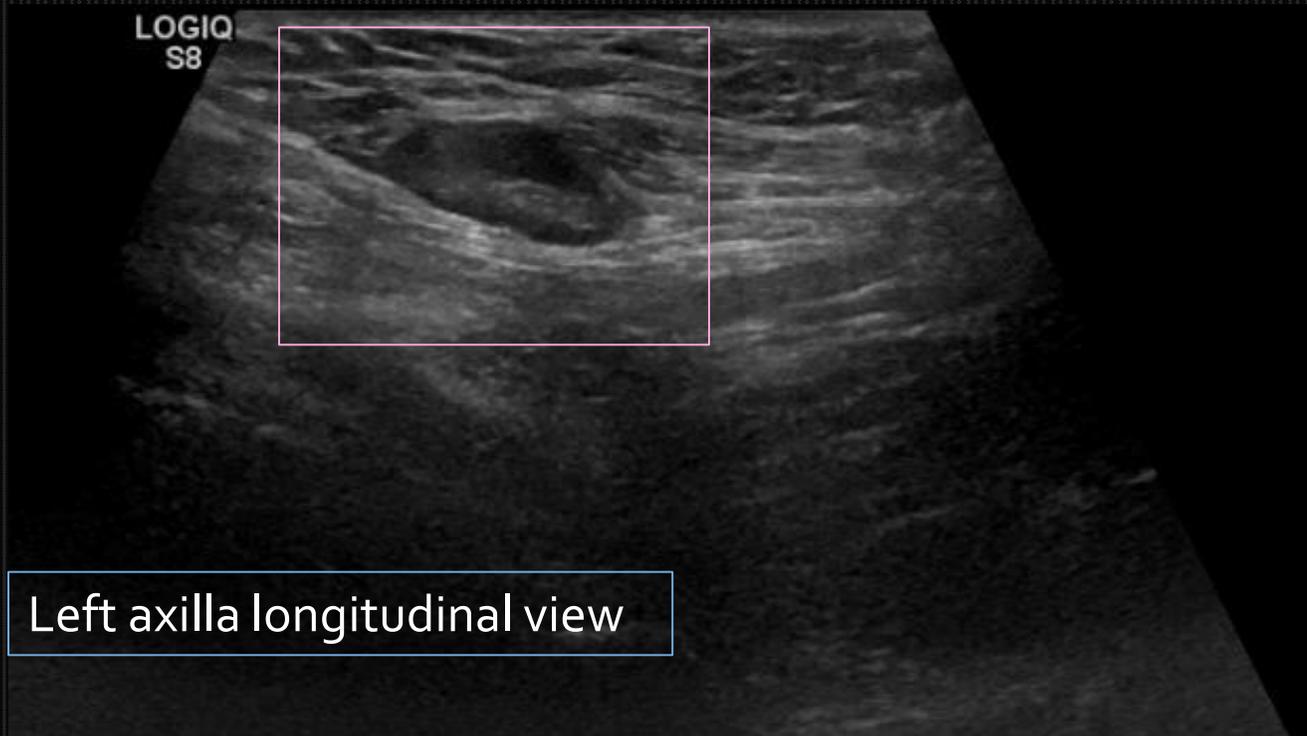
Targeted ultrasound of right axilla



Right axilla transverse view

There are numerous, morphologically abnormal, and bulky axillary lymph nodes. The **largest lymph nodes** measure approximately 9.9 x 4.5 cm and 5.1 x 5.1 cm.

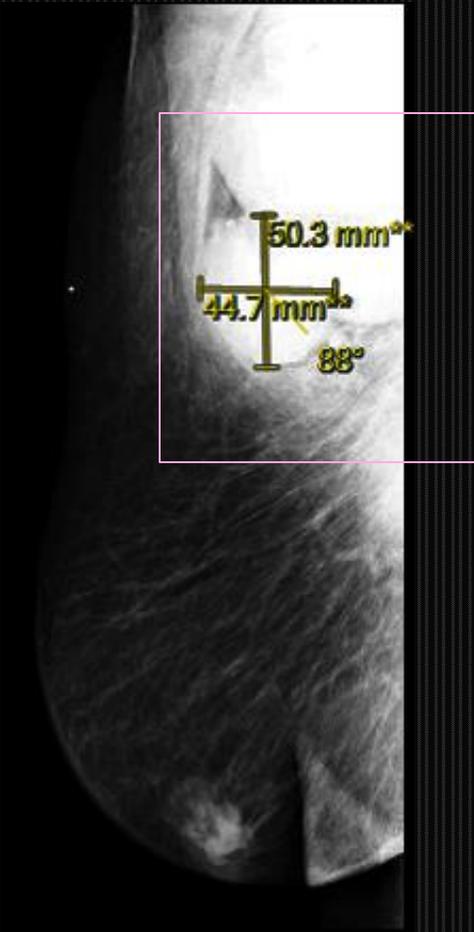
Targeted ultrasound of left axilla



Targeted ultrasound of the left axilla demonstrates a mildly prominent **left axillary lymph node**.

Due to the presence of bilateral enlarged lymph nodes, a bilateral diagnostic mammogram was performed.

Bilateral diagnostic mammogram



Right MLO view

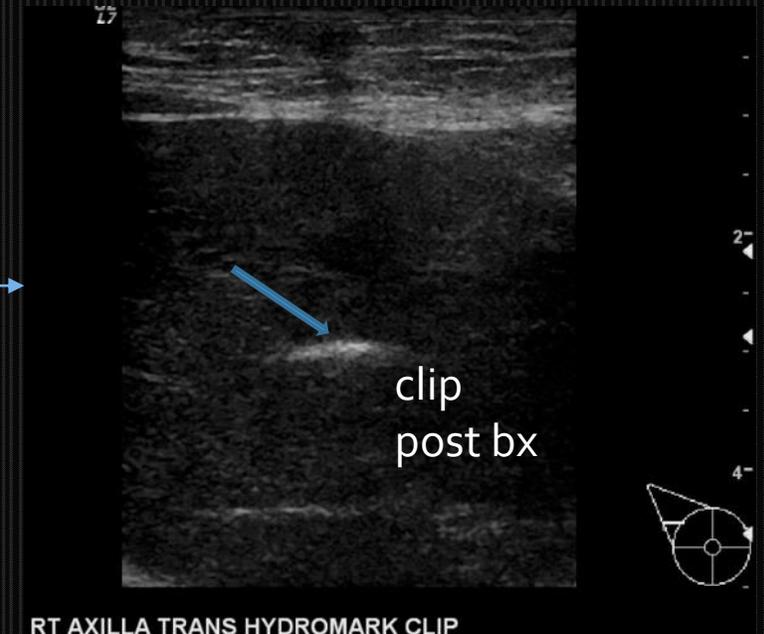
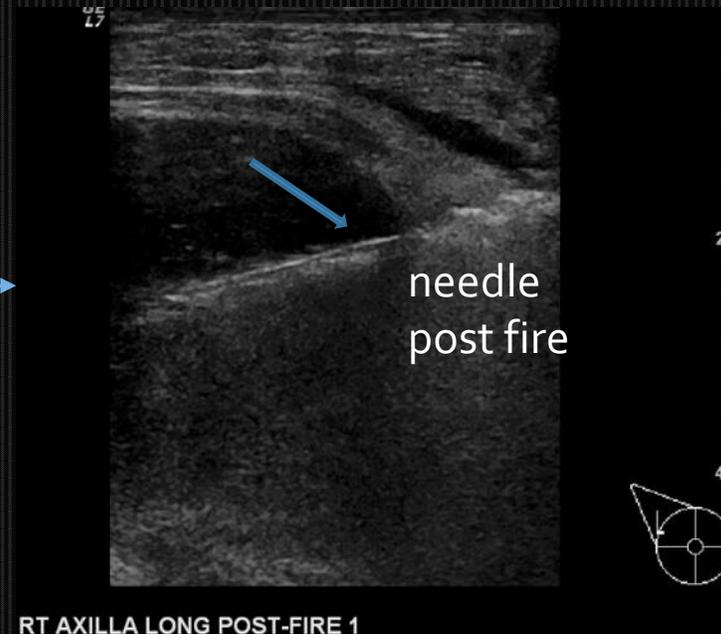
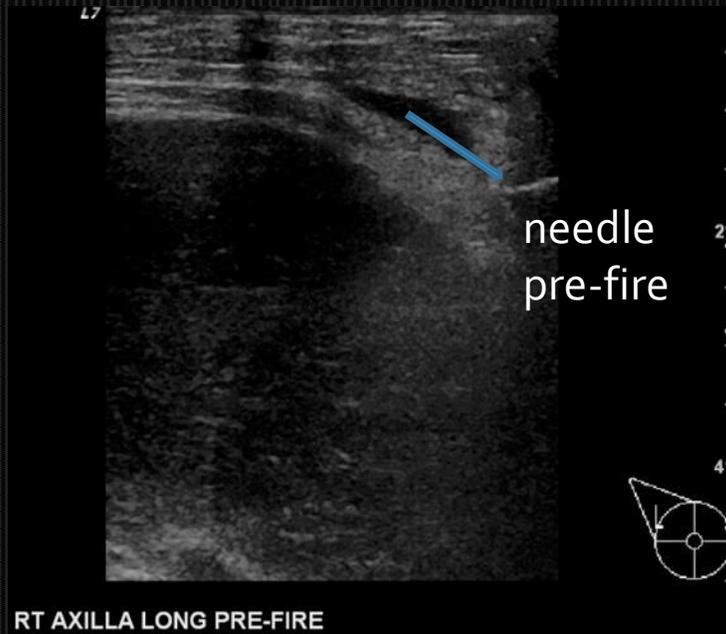


Left MLO view

There are no suspicious masses, malignant type calcifications, architectural distortion, or concerning asymmetries in either breast. **Bulky right axillary lymphadenopathy** is demonstrated. There is a prominent **left axillary lymph node** with associated microcalcifications.

BI-RADS 4C: Suspicious. High suspicion for malignancy. Ultrasound-guided biopsy was recommended of the right axillary mass.

Ultrasound-guided core needle biopsy of right axillary mass



Core needle biopsy of the axillary mass was performed with ultrasound guidance, aseptic technique, and 1% lidocaine as the local anesthetic. Three core samples were obtained with a 14-gauge Achieve biopsy device. The samples were placed in formalin and a hydromark biopsy marking clip was placed at the biopsy site.

Patient outcome

- Hematopathology: Classic Hodgkin lymphoma
- Staging:
 - B symptoms (i.e. fever, night sweats, weight loss)
 - Further imaging: CXR, CT chest/abdomen/pelvis, PET scan, +/- bone marrow aspiration and biopsy
- Follow-up with hematology/oncology
- 5-year survival for all patients diagnosed with HL ~86%

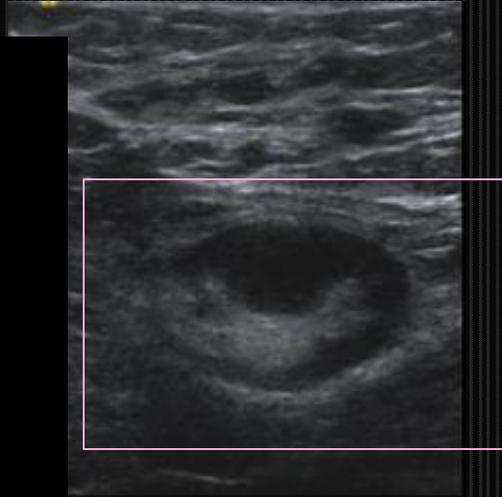
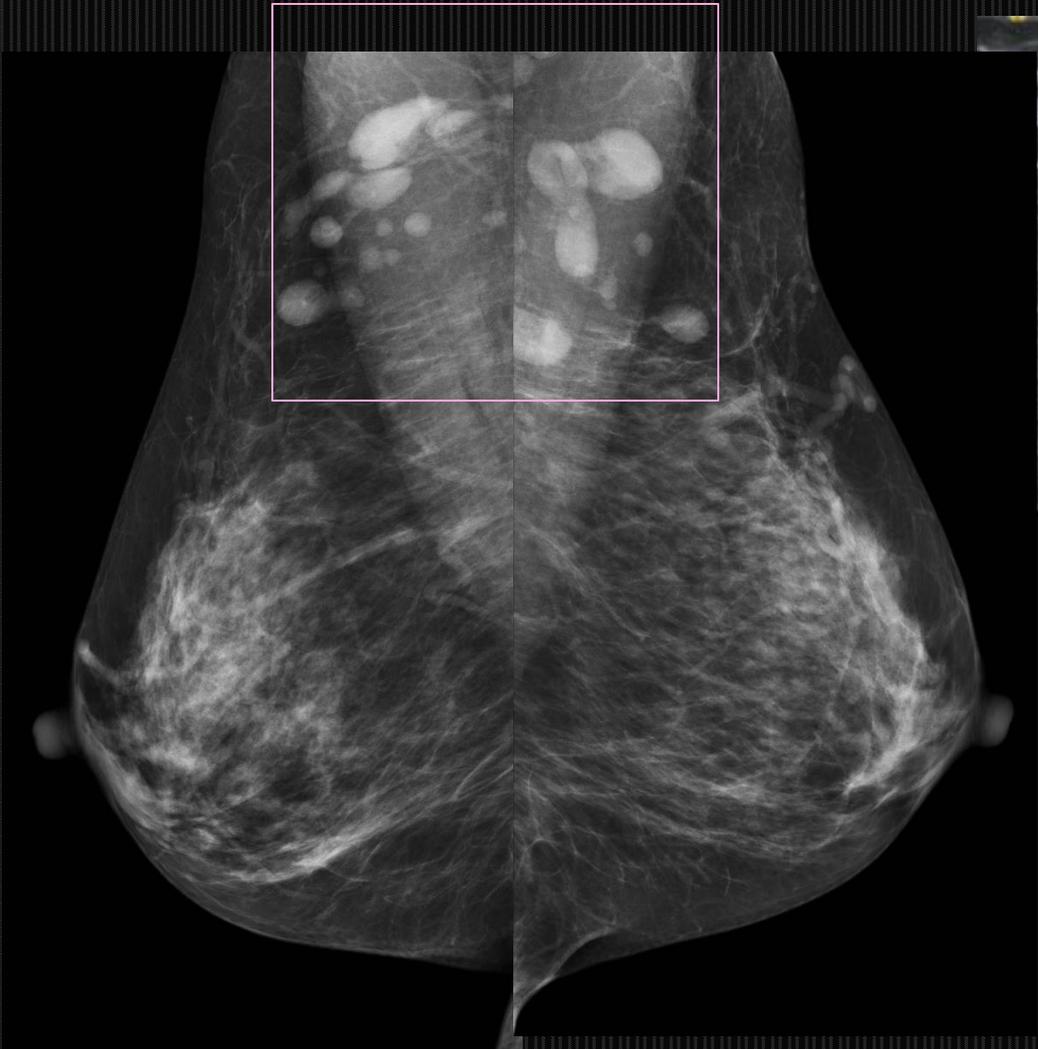
Companion case: HIV



54-year-old woman presents for annual screening mammogram.

There are no suspicious masses, asymmetries, architectural distortion, or suspicious calcifications in either breast. **Bilateral axillary lymphadenopathy** is noted. In the setting of known HIV, this finding would be classified as BI-RADS 2: Benign.

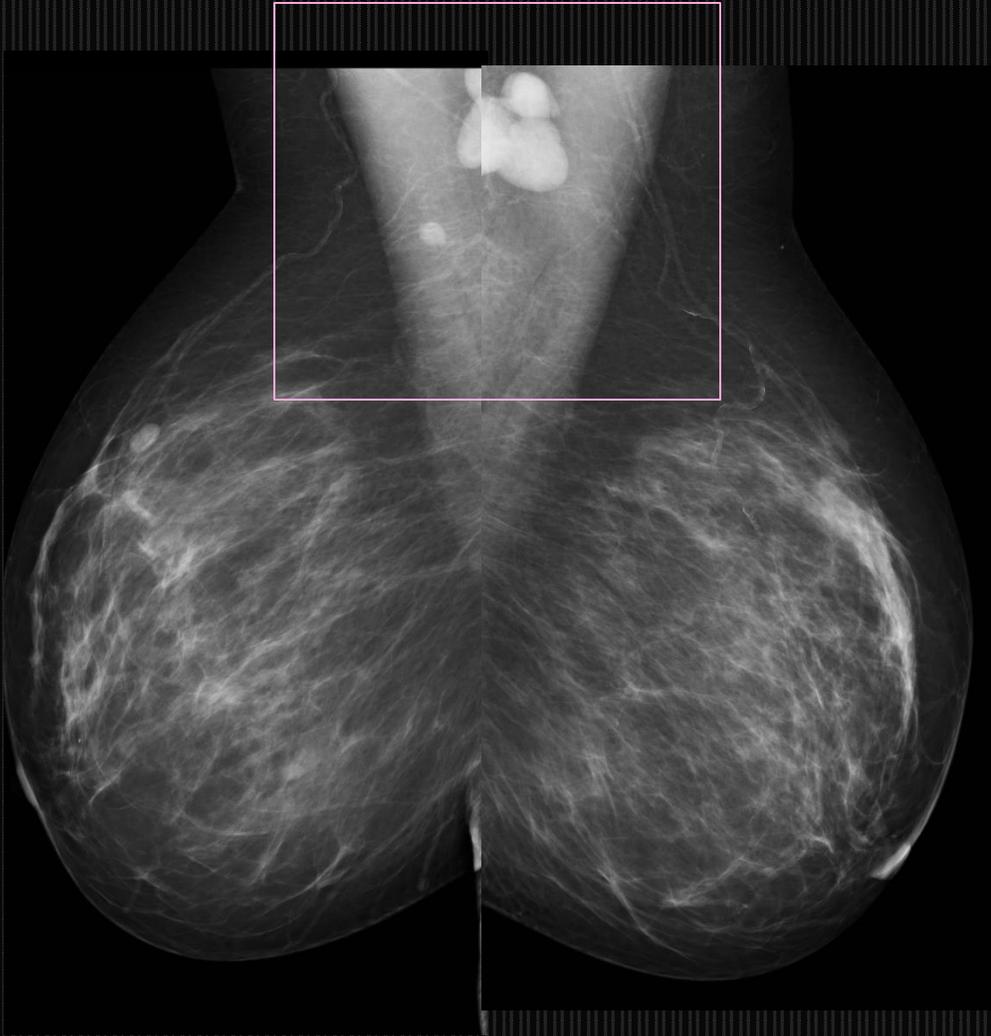
Companion case: Sarcoidosis



52-year-old female undergoes screening mammogram and is found to have **bilateral axillary lymphadenopathy**, which is re-demonstrated on targeted ultrasound of bilateral axilla (left axillary ultrasound image shown).

Review of her history reveals diagnosis of sarcoidosis.

Companion case: CLL



67-year-old female undergoes screening mammogram and is found to have **bilateral axillary lymphadenopathy**, for which she is called back for diagnostic workup confirming lymphadenopathy of unknown etiology.

She is found to have chronic lymphocytic leukemia (CLL) on core needle biopsy.

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Teaching points

- Initial laboratory evaluation of axillary lymphadenopathy should include CBC with differential, CMP, HIV Ag/Ab, LDH, uric acid
- The axillary lymph nodes are involved in up to 50% of patients with symptomatic breast cancer and in 10-20% of patients with breast cancers identified by screening
- Axillary lymphadenopathy can also be a benign finding on screening mammography associated with many systemic diseases

References

1. Ikeda DM and Miyake KK. (2017). Clinical breast problems and unusual breast conditions. In *Breast imaging: The requisites* (pp. 397-438). Retrieved from <https://www-clinicalkey-com>.
2. Hacker NF and Friedlander ML. (2016). Breast disease: a gynecologic perspective. In *Hacker & Moore's Essentials of Obstetrics and Gynecology* (pp. 348-355). Retrieved from <https://www-clinicalkey-com>.
3. American Cancer Society. (2019 Jan 8). *Key statistics for Hodgkin lymphoma*. Retrieved from <https://www.cancer.org/cancer/hodgkin-lymphoma/about/key-statistics.html>.