

Mucosa-Associated Tissue (MALT) Lymphoma in Diabetes Mellitus (DM) Mastopathy

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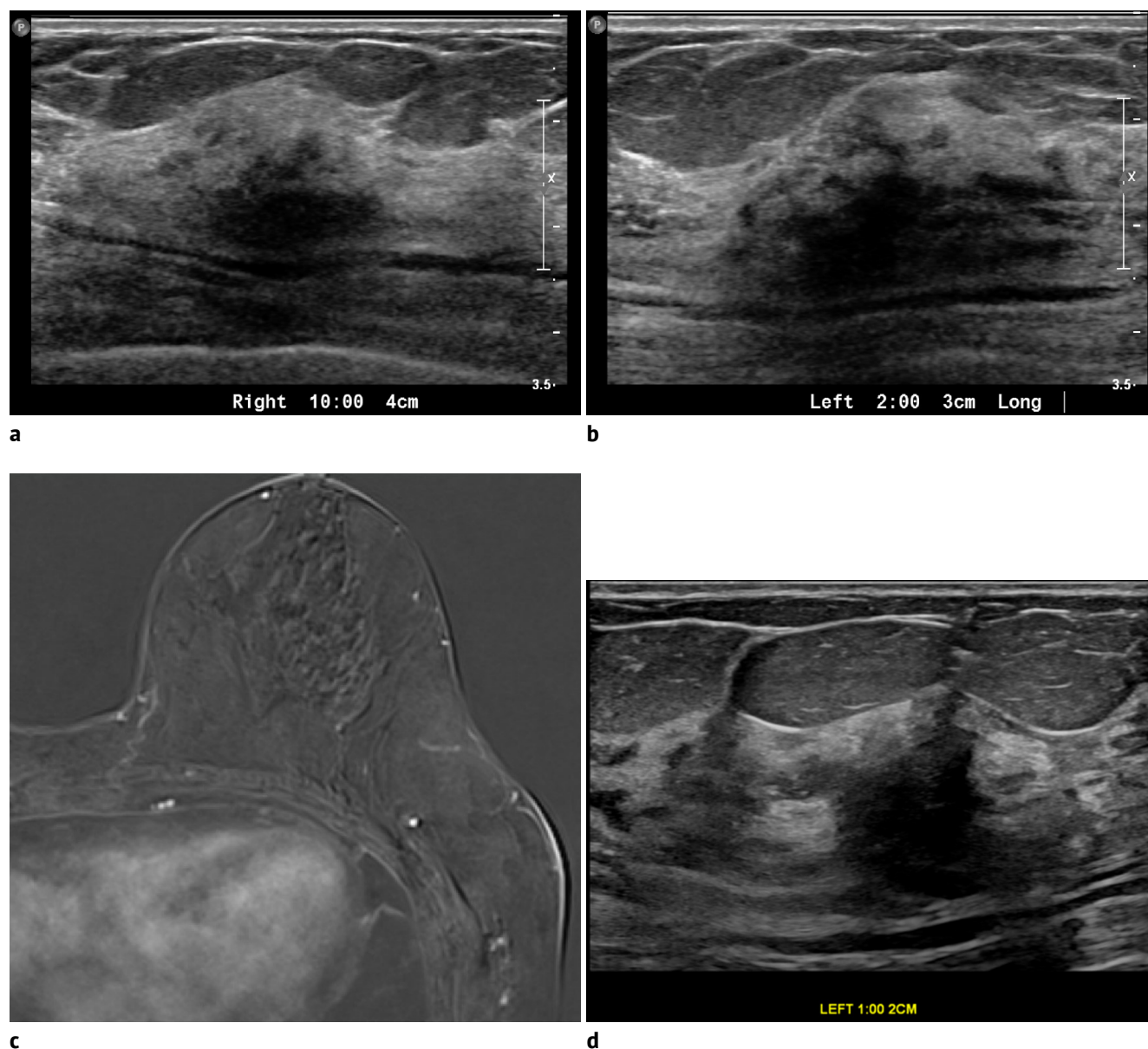


Fig. 1. A 74-year-old woman with abnormal US findings. **a.** The breast US reveals a hypoechoic non-mass lesion in the upper outer quadrant of the right breast. It was diagnosed with surgical excision as MALT lymphoma. **b.** A similar non-mass lesion appears in the upper outer quadrant of the left breast. It was diagnosed as DM mastopathy at the core needle biopsy. **c.** Two years after the initial US, MRI showed no enhancement in the left breast. **d.** The non-mass lesion in the left breast showed no change in follow-up US 2 years later.

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A 74-year-old woman was admitted for abnormal findings at outside ultrasound (US). She had a Type I diabetes mellitus (DM) for 30 years. Breast US showed focal non-mass lesion at both upper outer quadrant (UOQ). The surgical excision of right UOQ lesion revealed that it is a mucosa-associated lymphoid tissue (MALT) lymphoma. The core needle biopsy of left UOQ lesion was as some lymphoid cell infiltrate with myxoid stromal change and stromal fibrosis, compatible finding with diabetic mastopathy (DM mastopathy).

MALT lymphoma is a non-Hodgkin's lymphoma associated with chronic inflammation. It typically occurs in the gastric mucosa or the thyroid parenchyma, and is rarely reported in the breast. Histologically, MALT lymphoma is characterized by heterogeneous small B-cells infiltrating the marginal zone of reactive lymphoid follicles and extending into epithelial tissues. On the other hand, DM mastopathy typically shows dense keloid-like parenchymal fibrosis with epithelioid

fibroblasts and prominent perivascular, periductal, and perilobular infiltrates of small lymphocytes. Both diseases have common pathologic feature as lymphocytes forming the lymphoepithelial lesion composed of predominantly B lymphocytes. The relationship between breast MALT lymphoma and DM mastopathy is not clear. But similar feature of pathology of two disease can show similar imaging finding on US. Therefore, radiologists should aware of the possibility of MALT-lymphoma in DM mastopathy.

References

1. Espinosa LA, Daniel BL, Jeffrey SS, Nowels KW, Ikeda DM. MRI features of mucosa-associated lymphoid tissue lymphoma in the breast. *AJR Am J Roentgenol* 2005;185:199-202.
2. Valdez R, Thorson J, Finn WG, Schnitzer B, Kleer CG. Lymphocytic mastitis and diabetic mastopathy: a molecular, immunophenotypic, and clinicopathologic evaluation of 11 cases. *Mod Pathol* 2003;16:223-228.