The Paralabral Cyst: A Mimicker of Axillary Lymphadenopathy in the Setting of COVID-19 Vaccination

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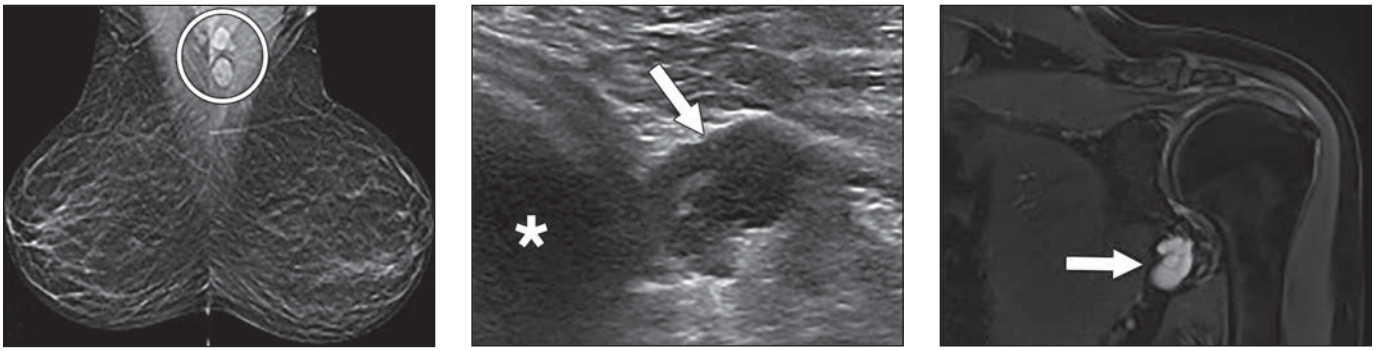

Fig. 1—55-year-old woman who underwent screening mammography 2 weeks after receiving second dose of COVID-19 vaccine.
A, Bilateral screening mammogram shows left axillary masses (*circle*) presumed to represent enlarged lymph nodes.
B, Left axillary ultrasound image shows oval hypoechoic mass (*arrow*) adjacent to humeral head (*asterisk*).
C, Coronal fat-saturated T2-weighted MR image of left shoulder shows inferior lobulated paralabral cyst (*arrow*).

A 55-year-old woman was called back from screening mammography because of left axillary lymphadenopathy (Fig. 1A). She had received the second dose of Pfizer COVID-19 vaccine in the left deltoid 2 weeks before the screening examination. Targeted ultrasound showed reactive axillary lymph nodes and a separate round mass inferomedial to the humeral head (Fig. 1B). Subsequent shoulder MRI showed an inferior lobulated paralabral cyst (Fig. 1C) that accounted for the mammographic finding. Recent COVID-19 vaccination poses a diagnostic dilemma for women undergoing screening mammography. Unilateral axillary lymphadenopathy in this setting is often reactive, but the imaging findings are nonspecific. The Society of Breast Imaging [1] recommends short-term sonographic follow-up to document improvement. In rare instances, paralabral cysts may resemble reactive axillary lymph nodes [2]. Paralabral cysts are associated with labral tears and can cause pain, weakness, and denervation of the supraspinatus and infraspinatus muscles secondary to nerve compression. These are benign and do not require intervention or imaging follow-up.

References

1. Grimm L, Destounis S, Dogan B, et al. SBI recommendations for the management of axillary adenopathy in patients with recent COVID-19 vaccination. Society of Breast Imaging website. www.sbi-online.org. Updated March 9, 2021. Accessed September 28, 2021
2. Net JM, Mirpuri TM, Plaza MJ, et al. Resident and fellow education feature: US evaluation of axillary lymph nodes. *RadioGraphics* 2014; 34:1817–1818

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