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Unilateral axillary adenopathy in the setting of COVID-19 vaccine: Follow-up

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ABSTRACT

With the Pfizer-BioNTech, Moderna, and now Johnson and Johnson COVID-19 vaccines readily available to the general population, the appearance of vaccine-induced axillary adenopathy on imaging has become more prevalent. We are presenting follow up to the first reported four cases of vaccine induced unilateral axillary adenopathy on imaging to our knowledge, which demonstrate expected self-resolving adenopathy. Our hope is that by providing this follow-up and reviewing current management guidelines, clinicians as well as patients will appreciate that this is an expected, benign, and self-resolving finding. In addition, we hope to quell any vaccine hesitancy brought about by recent mainstream media attention to this topic and ultimately empower patients to receive both the COVID-19 vaccine and undergo routine screening mammography, as both are vital to their health.

1. Introduction

We previously reported four cases of patients who were found to have unilateral axillary adenopathy on breast imaging after receiving either the first or second dose of the Pfizer-BioNTech or Moderna COVID-19 vaccine in the ipsilateral upper extremity.[1] Of the four cases, three patients (Case 1, Case 2, and Case 4) have presented for follow-up imaging demonstrating resolution of the previously noted unilateral axillary adenopathy. One patient (Case 3) was noted to have resolution of the unilateral axillary adenopathy on physical exam.

2. Case series

2.1. Case 1

59-year-old female initially presented for evaluation of a palpable lump in her left axilla with targeted ultrasound demonstrating a left axillary lymph node measuring 2.6 × 1.5 × 1.6 cm with uniform cortical thickening of 0.7 cm corresponding to the patient's palpable area of concern. She had received the first dose of the Pfizer-BioNTech COVID-19 vaccine in the left upper extremity nine days prior to imaging. At that time, the abnormal axillary lymph node was thought to most likely be reactive, attributed to recent ipsilateral upper extremity vaccination, and assessed as BI-RADS category 3. Short-term follow-up targeted ultrasound of the left axilla in 4–12 weeks was recommended to ensure resolution. The patient presented for follow-up targeted ultrasound of the left axilla seven weeks later, which was five weeks after receiving the second dose of the Pfizer-BioNTech COVID-19 vaccine and was noted to have resolution of the previously noted unilateral left axillary adenopathy (Fig. 1).

2.2. Case 2

42-year-old female presented for routine screening mammogram with screening ultrasound, and on screening ultrasound was noted to have multiple left axillary lymph nodes with uniformly thickened cortices, the largest of which measured 2.7 × 1.2 × 1.0 cm (Fig. 2a, b). She had received the second dose of the Pfizer-BioNTech COVID-19 vaccine in her left upper extremity five days prior to imaging. At that time, the abnormal axillary lymph nodes were thought to most likely be reactive, attributed to recent ipsilateral upper extremity vaccination, and assessed as BI-RADS category 3. Short-term follow-up targeted ultrasound of the left axilla in 4–12 weeks was recommended to ensure resolution. The patient presented for follow-up targeted ultrasound of

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