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Covid-19: Schedule breast screening before vaccine or 4 to 6 weeks after to avoid false positives, says guidance

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Breast screening appointments should be scheduled to take place before women receive a first dose of covid-19 vaccine or four to six weeks after the second dose when possible, the Drug Safety Research Unit has said.¹

The advice has been given because of the potential for the swelling of lymph nodes in one armpit (the side of the injection) following vaccination, which could be detected during routine breast screening and cause unnecessary concern.

Lymphadenopathy (swelling of lymph nodes) is a known adverse event of the Moderna and Pfizer BioNTech covid-19 vaccines and has been estimated to occur in 11.6% of people receiving their first dose and 16% of people receiving their second dose. The swelling usually settles within a few days, however it can cause concern, particularly in patients with a personal or familial history of breast cancer or carriers of the BRCA gene mutation, as unilateral axillary adenopathy (swelling of the lymph node in one armpit) can be a differential diagnosis. If screening occurs shortly after covid-19 vaccination, therefore, it could lead to a false positive result, further tests being ordered, and considerable emotional stress for the patient.

Commenting on how the potential problem was first spotted, director of the Drug Safety Research Unit Saad Shakir said, "Following case reports, societies of clinical and breast imaging in the US gave guidance on the effect of covid-19 related axillary lymphadenopathy on breast cancer imaging. These effects were also observed in clinical trials for some of the covid-19 vaccines."

Shakir added that while there was no evidence of this in Oxford AstraZeneca vaccine trials, a detailed search for post-marketing data had not yet been performed.

¹ Lane S, Shakir S. Pharmacovigilance evidence review: the effect of covid-19 vaccines on breast screening. Drug Safety Research Unit. 26 February 2021. www.dsru.org/pharmacovigilance-evidence-review-the-effect-of-covid-19-vaccines-on-breast-screening.

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