Medical Minute By Erika Bell, Ph.D., Manager of Cancer Information and Education

A sore arm, headache, chills, fever, and fatigue are all potential side effects from the COVID-19 vaccine of which you are likely aware. But did you know that the vaccine could also potentially affect your screening mammogram? This is because the immune system response to vaccination can cause swollen lymph nodes under the arm, usually on the same side that you received the shot. This is a normal reaction that can indicate the body is producing antibodies to fight off the virus, should you encounter it in the future. However, if these swollen lymph nodes appear on a screening mammogram, they can be mistaken for potential cancer and could provoke an unnecessary biopsy. According to the Center for Disease Control, 16% of vaccinated individuals experienced underarm lymph node swelling after their second dose of the Moderna or Pfizer-BioNTech COVID-19 vaccines. The swelling usually occurs two to four days after vaccination and can last up to ten days.

Recognizing these findings, the Society of Breast Imaging recommends that women have a screening mammogram either before vaccination, or four to six weeks after completing vaccination. However, if a woman is at high-risk for breast cancer, or if her screening has already been delayed, this guidance does not apply. Similarly, a diagnostic mammogram, for a mass that can be felt, should not be delayed due to vaccination. When a woman does go for her mammogram, it's important for her to share with the radiologist the dates of her COVID-19 vaccination and in which arm she received the shots. If swollen lymph nodes are found on a screening mammogram, and the vaccine was given within four weeks of the screening, the Society of Breast Imaging recommends appropriate diagnostic evaluation, such as an ultrasound, and a follow-up exam four to twelve weeks later. If the swollen lymph nodes persist, they suggest considering a biopsy.

References/Additional Resources:

https://www.diagnosticimaging.com/view/sbi-publishes-management-guidance-for-covid-19-vaccine-related-adenopathies

https://www.pennmedicine.org/updates/blogs/health-and-wellness/2021/march/covid-vaccine-and-mammograms