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Review

Regional lymphadenopathy following COVID-19 vaccination: Literature review and considerations for patient management in breast cancer care



Emanuele Garreffa ^{a,*}, Ahmed Hamad ^a, Ciara C. O'Sullivan ^b, Antonious Z. Hazim ^d, Joanne York ^e, Shama Puri ^e, Anne Turnbull ^e, John F. Robertson ^{a,f}, Matthew P. Goetz ^{b,c}

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KEYWORDS

COVID-19; Vaccine; Lymphadenopathy; Breast cancer; Cancer diagnosis; Cancer follow-up **Abstract** *Purpose:* Over 1 billion doses of COVID-19 vaccines have been already administered across the United States, the United Kingdom and the European Union at the time of writing. Furthermore, 1.82 million booster doses have been administered in the US since 13th August, and similar booster programmes are currently planned or under consideration in the UK and the EU beginning in the autumn of 2021. Early reports showed an association between vaccine administration and the development of ipsilateral axillary and supraclavicular lymphadenopathy, which could interfere with the diagnosis, treatment and follow-up of breast cancer patients. In this paper, we review the available evidence on vaccine-related lymphadenopathy, and we discuss the clinical implications of the same on breast cancer diagnosis and management.

Methods: A literature search was performed — PubMed, Ovid Medline, Scopus, CINHAL, Springer Nature, ScienceDirect, Academic Search Premier and the Directory of Open Access Journals were searched for articles reporting on regional palpable or image-detected lymphadenopathy following COVID-19 vaccination.

Separately, we compiled a series of case studies from the University Hospitals of Derby and Burton, United Kingdom and the Mayo Clinic in Minnesota, United States of America, to

^a Breast Surgery, University Hospitals of Derby and Burton, Derby, UK

^b Department of Oncology, Mayo Clinic, Rochester, MN, USA

^c Department of Molecular Pharmacology and Experimental Therapeutics, Mayo Clinic, Rochester, MN, USA

^d Department of Internal Medicine, Mayo Clinic, Rochester, MN, USA

^e Breast Radiology, University Hospital of Derby and Burton, Derby, UK

^f University of Nottingham, Nottingham, UK

^{*} Corresponding author: Breast Unit - Royal Derby Hospital, University Hospitals of Derby and Burton NHS Foundation Trust, Uttoxeter Road, Derby DE22 3NE, UK.

E-mail address: emangar@live.it (E. Garreffa).