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Short communication

Supraclavicular lymphadenopathy following COVID-19 vaccination: an increasing presentation to the two-week wait neck lump clinic?

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Abstract

The first COVID-19 vaccination was given in December 2020 and there is an effort to vaccinate the international population on a massive scale. Common side effects from the vaccine include headache and tiredness. Regional lymphadenopathy has been described in relation to other vaccines. We describe two cases of supraclavicular reactive lymphadenopathy presenting in patients who had the COVID vaccination in the ipsilateral arm. Awareness of this diagnosis is important for patients presenting to the neck lump clinic.

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The first COVID-19 vaccination was given to an NHS patient on 8 December 2020.¹ Since then then over fifteen million people have received the vaccine in England and this number will significantly increase as the population is offered it.² Common side effects include a sore arm, tiredness, headaches, and general malaise.

We report two cases of reactive supraclavicular lymphadenopathy following COVID-19 vaccination presenting at the same two-week wait neck lump clinic. A 47-year-old and a 55-year-old female, both otherwise fit and well, had received the COVID vaccination in their left arms three weeks previously. They both then developed a swollen left supraclavicular lymph node about three days later and were referred to the urgent neck lump clinic on the two-week wait cancer pathway to exclude malignancy. One of the patients reported that the lump had since reduced in size. Clinical and ultrasonographic examination confirmed the lumps as reac-

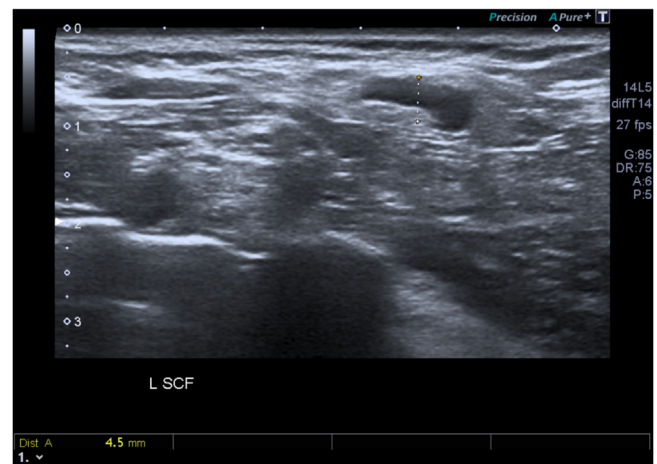


Fig. 1. 4.5mm reactive lymph node in the left supraclavicular fossa.

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tive lymph nodes (Fig. 1). No other neck lymphadenopathy was identified and both patients were reassured and discharged.

Cervical lymphadenopathy has been reported as a side effect to other vaccinations such the human papilloma and influenza vaccinations.^{3–5} Axillary lymphadenopathy mimicking breast cancer has recently been described as a side effect of the COVID-19 vaccination.⁶ While the lymphatic pathway from the arm mainly drains to the axillary nodes there are also connections to the supraclavicular nodes in the low neck. To our knowledge this is the first report of COVID-19 vaccination related lymphadenopathy mimicking a Virchow-node type presentation.

With the increasing roll-out of the COVID vaccination to the wider population we suspect that neck lump clinics will see more patients being referred with COVID-19 vaccination-related reactive lymphadenopathy. It is worth considering this ‘new’ diagnosis in the differential list and asking patients whether they have received the vaccination recently.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patients’ permission

Not necessary.

References

1. NHS UK. Landmark moment as first NHS patient receives COVID-19 vaccination. Available from URL: <https://www.england.nhs.uk/2020/12/landmark-moment-as-first-nhs-patient-receives-covid-19-vaccination/> (last accessed 22 February 2021).
2. NHS UK. COVID vaccinations. Available from URL: <https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/> (Last accessed 22 February 2021).
3. Pereira MP, Flores P, Neto AS. Neck and supraclavicular lymphadenopathy secondary to 9-valent human papillomavirus vaccination. *BMJ Case Rep* 2019;**12**:e231582.
4. Shirone N, Shinkai T, Yamane T, et al. Axillary lymph node accumulation on FDG-PET/CT after influenza vaccination. *Ann Nuclear Med* 2012;**26**:248–52.
5. Studdiford J, Lamb K, Horvath K, et al. Development of unilateral cervical and supraclavicular lymphadenopathy after human papilloma virus vaccination. *Pharmacotherapy* 2008;**28**:1194–7.
6. Mehta N, Sales RM, Babagbemi K, et al. Unilateral axillary lymphadenopathy in the setting of COVID-19 vaccine. *Clin Imaging* 2021;**75**:12–5.