



## Case illustrated

## Posterior auricular lymphadenopathy in adult rubella



Satoshi Ide<sup>a,b</sup>, Masahiro Ishikane<sup>a,\*</sup>, Norio Ohmagari<sup>a,b</sup>

<sup>a</sup>Disease Control and Prevention Center, National Center for Global Health and Medicine, Tokyo, Japan

<sup>b</sup>Emerging and Reemerging Infectious Diseases, Graduate School of Medicine, Tohoku University, Sendai, Japan

## ARTICLE INFO

## Article history:

Received 18 January 2021

Received in revised form 25 March 2021

Accepted 25 March 2021

## Keywords:

Lymphadenopathy

Measles

Vaccination

Reemerging disease

In 2019, a 22-year-old Japanese man presented with fever, rash, and posterior auricular lymphadenopathy (Fig. 1). He had contact with someone who was diagnosed with rubella a week ago. His vaccination status was uncertain and was diagnosed with rubella based on the presence of rubella-specific IgM antibody in serum and reverse-transcription-polymerase chain reaction of throat swab, and recovered with supportive therapy.

Rubella is a contagious and mild viral disease characterized by fever, generalized rash, and lymphadenopathy. During 2012–2013 and 2018–2019, Japan had rubella outbreaks that mainly involved men who were born between 1962 and 1979 and hence, were not eligible for the national rubella vaccination program for children [1]. To tackle the rubella outbreaks, the Japanese government since 2019 has distributed Rubella Coupon Tickets, which makes them eligible for antibody testing and vaccination [2]. Lymphadenopathy, especially posterior auricular lymphadenopathy, is one of the classical symptoms of rubella. Clinicians need to pay attention to the lymphadenopathy, (especially in the posterior auricular and sub-occipital region) as well as fever and rash, and contribute to prevent the spread of rubella by early diagnosis [3].



Fig. 1. Left posterior auricular lymphadenopathy and rash on face and neck.

\* Corresponding author at: 1-21-1 Toyama, Shinjuku-ku, Tokyo, 162-8655, Japan.  
E-mail address: [ishikanemasahiro@gmail.com](mailto:ishikanemasahiro@gmail.com) (M. Ishikane).

## Funding

This work was supported by the NCGM Intramural Research Fund [grant number 20A05].

## Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request

## CRediT authorship contribution statement

**Satoshi Ide:** Writing - original draft. **Masahiro Ishikane:** Writing - review & editing, Conceptualization. **Norio Ohmagari:** Supervision, Resources.

## Declaration of Competing Interest

The authors report no declarations of interest.

## Acknowledgment

We thank all the clinical staff at the National Center for Global Health and Medicine for their dedicated clinical practice and patient care.

## References

- [1] Nomoto H, Ishikane M, Nakamoto T, Ohta M, Morioka S, Yamamoto K, et al. Conjunctivitis, the key clinical characteristic of adult rubella in Japan during two large outbreaks, 2012-2013 and 2018-2019. *PLoS One* 2020;15(4):e0231966.
- [2] Ministry of Health, Labour and Welfare, Japan. Additional countermeasures for rubella. Available from <https://www.niid.go.jp/niid/ja/rubella-m-111/rubella-top/2145-rubella-related/8278-rubella1808.html> [Accessed 16 January 2021].
- [3] Lang S, Kansy B. Cervical lymph node diseases in children. *GMS Curr Top Otorhinolaryngol Head Neck Surg* 2014;13:Doc08.