



Medical Imagery

A case of adult rubella in Japan



ARTICLE INFO

Article history:

Received 19 January 2019

Received in revised form 22 February 2019

Accepted 22 February 2019

Corresponding Editor: Eskild Petersen, Aarhus, Denmark

Keywords:

Rubella

Posterior cervical lymphadenopathy

Posterior auricular lymphadenopathy

Diffuse erythema

Vaccination

ABSTRACT

We report the case of a 32-year-old Japanese female who presented with a mild sore throat, rash and posterior cervical and posterior auricular lymphadenopathy. She was diagnosed with rubella. Japan has experienced multiple outbreaks of rubella in recent times. Travelers to Japan should consider getting vaccinated for rubella.

© 2019 The Author(s). Published by Elsevier Ltd on behalf of International Society for Infectious Diseases. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

A 32-year-old Japanese woman living in Kamakura presented with complaints of rash for 1 day, along with a mild sore throat for 3 days. The rash had first appeared on the face, followed by the trunk and extremities and caused little itching (Figure 1A). She also had an apparent posterior cervical and posterior auricular lymphadenopathy (Figure 1B). She had no recent history of travel or exposure to animals or insects. She had no history of rubella vaccination. The diagnosis of rubella was confirmed based on a serum rubella IgM test.

In Japan, starting in 1977, only female junior high school students received a single round of rubella vaccination under the national immunization program. Although the program was extended to provide universal coverage from 1995 onwards, the immunization rate among eligible children remained low until 2005. The program was revised in 2006 to provide two rounds of vaccination to the children, which is considered the optimal schedule for immunization.

The number of rubella cases in Japan is increasing tremendously. As of December 19, 2018, the cumulative number of rubella cases was 2714, with 96% of these occurring in adults. Among these cases, 33.1% were reported from Tokyo (Infectious Disease Surveillance Center, 2018).

Kato et al. (2013) reported that lymphadenopathy (posterior auricular, occipital, and posterior cervical) is the characteristic clinical feature of adult-onset rubella (92.6%). In particular, posterior auricular lymphadenopathy is specific to rubella (Lang and Kansy, 2014). It is important to check for lymphadenopathy in order to differentiate adult-onset rubella from similar disorders such as measles (Kato et al., 2013).

Recently, Japan has experienced frequent outbreaks of rubella and measles (Nishiura et al., 2017). Thus, rubella remains a major health concern, especially because the upcoming 2020 Olympic Games will be held in Tokyo.

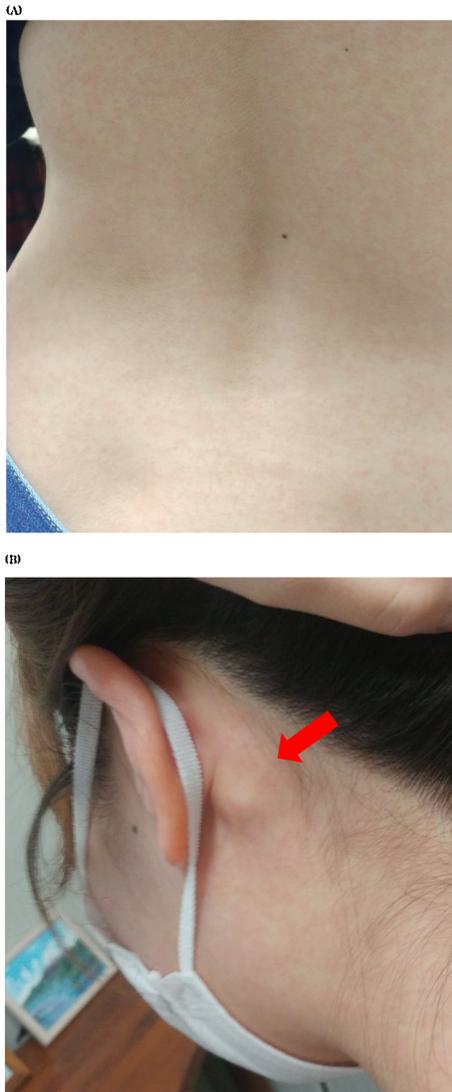


Figure 1. Clinical picture. (A) Diffuse erythema over the trunk. (B) Posterior auricular lymphadenopathy in rubella.

Funding source

None of the authors received funding from any source.

Ethical approval

The patient gave her approval for the publication of her clinical case.

Conflict of interest

None of the authors has a conflict of interest.

References

- Infectious Disease Surveillance Center, National Institute Of Infectious Disease. <https://www.niid.go.jp/niid/images/epi/rubella/181219/rubella181219.pdf>. [Accessed 11 December 2018].
- Kato H, Imamura A, Sekiya N, Yanagisawa N, Suganuma A, Ajisasawa A. Medical study of cases diagnosed as rubella in adults. *Kansenshogaku Zasshi* 2013;87:603–7.
- Lang S, Kansy B. Cervical lymph node diseases in children. *GMS Curr Top Otorhinolaryngol Head Neck Surg* 2014;13: Doc08.
- Nishiura H, Mizumoto K, Asai Y. Assessing the transmission dynamics of measles in Japan, 2016. *Epidemics* 2017;20:67–72.

Sayaka Tago^{a,b}
Yuji Hirai^{b,*}

^aDepartment of Infectious Diseases, Shonan Memorial Hospital, 2-2-60, Fueda, Kamakura, Kanagawa, Japan

^bDepartment of Infectious Diseases, Tokyo Medical University Hachioji Medical Center, 1163, Tatemachi, Hachioji, Japan

* Corresponding author at: Department of Infectious Diseases, Tokyo Medical University Hachioji Medical Center, 1163, Tate-machi, Hachioji, Japan.

E-mail addresses: asahatasayaka@gmail.com (S. Tago), y-hirai@tokyo-med.ac.jp (Y. Hirai).

Corresponding Editor: Eskild Petersen, Aarhus, Denmark

Received 19 January 2019

Received in revised form 22 February 2019

Accepted 22 February 2019