

ProMed (2014 年 1 月 10 日) 概要

## デングウイルス感染—日本（本州）から帰国したドイツ人旅行者におけるデングウイルス感染

日本（本州）旅行から帰国した生来健康な女性（51 歳）が、2013 年 9 月 9 日にドイツ（ベルリン）の病院を受診。9 月 3 日より、40 度の熱、嘔気、続いて、斑状丘疹状皮疹が出現。入院 9 日前に、2 週間の日本旅行（8 月 19～31 日）から帰国。旅程は以下のとおり。

8/19-21 長野県上田市  
8/21-24 山梨県笛吹市  
8/24-25 広島県  
8/25-28 京都府  
8/28-31 東京都

患者は、笛吹市において、複数個所、蚊に刺されたと申告している。フランクフルト—東京間の往復は直行便を利用。鑑別診断の結果、臨床像より、デング熱を疑った。発症後 7 日目に採取された、第 1 回目の血清サンプルにおいて、デングウイルス IgM 及び IgG 抗体（間接蛍光抗体法、迅速試験）及びデングウイルス NS1 抗原（ELISA 法、迅速試験）ともに陽性であったことから、患者はデングウイルス急性感染であることが示された。デングウイルス RNA（リアルタイム RT-PCR 法）及びフラビウイルス共通遺伝子（RT-PCR 法）は陰性であった。入院 1 週間後、患者は回復して退院した。日本からのデング熱の輸入症例は極めて珍しい<sup>1</sup>ことから、2013 年 12 月（発症後 110 日目）に第 2 回目の血清サンプルを採取し、デングウイルス IgG 抗体（間接蛍光抗体法）が有意に減少、デングウイルス NS1 抗原（ELISA 法、迅速試験）及び IgM 抗体（間接蛍光抗体法、迅速試験）が陰性との結果が得られた。

これは、日本からドイツに輸入され、実験室診断されたデングウイルス感染症の第一例目である。患者の行動履歴によれば、患者の行動やデングウイルスの潜伏期間を考慮すると、当該患者は日本でデング熱に感染した可能性が高い。以上より、2013 年夏に日本（本州）から帰国した発熱を有する旅行者に対する鑑別診断では、デング熱が含まれることになる。さらに、日本におけるデングウイルス感染に対しては、早期に十分な予防法がとられるよう、より詳細な調査がなされるべきである。

投稿者：

Jonas Schmidt-Chanasit *et al.* Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany

Christiana Frank *et al.* Robert Koch Institute, Berlin, Germany

原典：<http://www.promedmail.org/direct.php?id=2162194>

<sup>1</sup>厚生労働省による注：過去 60 年以上、デング熱の日本国内における感染例は報告されていない。



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DENGUE/DHF UPDATE (03); GERMANY (BERLIN) ex JAPAN, REQUEST FOR INFORMATION  
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A ProMED-mail post  
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ProMED-mail is a program of the  
International Society for Infectious Diseases  
<http://www.isid.org>

Date: Thu 9 Jan 2014  
From: Jonas Schmidt-Chanasit <jonassi@gmx.de> [edited]

#### Autochthonous dengue virus infection in Japan

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A previously healthy 51-year-old woman sought treatment in a hospital in Berlin on 9 Sep 2013 after returning from travel to Japan (Honshu). Since 3 Sep 2013 she suffered from fever up to 40 deg C [104 deg F] and nausea, followed by a maculopapular rash. 9 days before admission she had returned from a 2 week round trip (19-31 Aug [2013]) from Japan [with sites visited on the following dates in August 2013]:

19-21 Ueda  
21-24 Fuefuki  
24-25 Hiroshima  
25-28 Kyoto  
28-31 Tokyo

She reported several mosquito bites while grape picking in Fuefuki. She flew nonstop from Frankfurt (International Airport) to Tokyo (Narita International Airport) and [back the same way]. Among several other diseases, dengue fever was suspected, because of the clinical picture. Initially, the 1st serum sample collected 7 days after disease onset gave a positive result in the dengue virus (DENV) IgM and IgG antibody tests (IFA [indirect fluorescent antibody] and rapid test), as well as for DENV NS1 antigen (ELISA and rapid test) demonstrating an acute DENV infection of the patient. Real-Time RT-PCR for DENV RNA and generic flavivirus RT-PCR were negative. After one week in hospital the patient was discharged with a characterization of *restitutio ad integrum* [total recovery]. A follow-up serum sample was collected in December 2013, because this acute case of dengue fever imported from Japan was considered very unusual. This 2nd serum sample collected 110 days after disease onset revealed a significant DENV IgG titer decrease (IFA) and negative results for DENV NS1 antigen (ELISA and rapid test) and DENV IgM (IFA and rapid test), respectively.

This is the 1st laboratory confirmed case of DENV infection imported from Japan to Germany. Most likely, according to the patient's activities and DENV incubation period, the infection was acquired in Japan. Thus, differential diagnosis in febrile returning travelers from Japan (Honshu) in late summer [2013] should include dengue fever. In addition, the autochthonous transmission of DENV in Japan should be further investigated to take adequate prevention measures early.

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Jonas Schmidt-Chanasit, Petra Emmerich, Dennis Tappe, Stephan Gunther  
Bernhard Nocht Institute for Tropical Medicine, WHO Collaborating Centre for Arbovirus and  
Haemorrhagic Fever Reference and Research, National Reference Centre for Tropical Infectious Diseases,  
Hamburg, Germany  
<jonassi@gmx.de>

Daniel Sagebiel, Kathrin Hentsche  
State Office of Health and Social Affairs, Berlin, Germany

Christina Frank, Irene Schuneberg, Klaus Stark  
Robert Koch Institute, Department for Infectious Disease Epidemiology, Berlin, Germany

[This case is, indeed, highly unusual because it implicates a dengue virus infection acquired locally in Japan, and indicates that there must have been other infected individuals in the area where she became infected. This is the 1st case of locally acquired dengue virus infection in Japan that ProMED-mail has ever posted.

There have been several examples of individuals who have become infected with dengue viruses in Southeast Asia and Africa and subsequently become ill in Japan, indicating that viremic individuals have been bringing dengue virus into the Japanese islands.

It would be of interest to know if there have been other cases of dengue virus infection acquired locally in Japan during the summer of 2013, and to know about the status of populations of dengue virus vector mosquitoes (*Aedes aegypti* and *Ae. albopictus*) in the areas that the patient visited.

ProMED-mail thanks Dr Jonas Schmidt-Chanasit and colleagues for sending in this 1st-hand report.

A HealthMap/ProMED-mail map of Japan can be accessed at <http://healthmap.org/r/62Cn>. - Mod.TY]

### See Also

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2012

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Dengue/DHF update 2012 (12) [20120319.1074013](#)

2010

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Dengue/DHF update 2010 (44) [20100826.3010](#)

2008

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Dengue/DHF update 2008 (35): Japan ex Cote d'Ivoire [20080818.2573](#)  
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