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A Case Report of Neonatal Legionellosis in a Nursery in Central Taiwan

Sung-Hsi Wei¹, Jen-Hsien Wang², Mei-Yen Chiu³, Ming-Fang Jian³, Shu-Hui Hsieh¹, Yan-Fang Yang¹, Chen-Pei Lin¹, Lei-Ron Tseng⁴, Hui-Tzu Chiu³, Chuen-Sheue Chiang⁴, Du-Lin Lin¹, Chih-chung Tu¹, Ching-Fen Ko¹, Min-Cheng Lin¹

- 1. Central Regional Center, Centers for Disease Control
- 2. China Medical University Hospital
- 3. Health Bureau, Taichung City Government
- 4. Center for Research, Diagnostics and Vaccine Development, Centers for Disease Control

Abstract

Legionnaires' disease is one of nosocomial infections. It is rarely occurred in infants. One 7-day-old healthy neonate developed pneumonia in a nursery room of an obstetrics and gynecology clinic. *Legionella pneumophila* serogroup 5 was isolated from his sputum sample. He recovered from the pneumonia episode after receiving antimicrobial medication against *Legionella pneumophila*. Parents of neonates born within three months of the neonate's Legionnaires' disease were telephone interviewed to investigate neonates' health condition after birth. Four neonates were hospitalized; none of them were positive for serological test against *Legionella pneumophila* serogroups 1-6.

One strain of *Legionella pneumophila* serogroup 5 was isolated from the water dispenser which is located in the room next to the nursery room which showed indistinguishable PFGE profile with that of the strain isolated from the patient. The water dispenser was used for formula preparation for the neonates in the nursery room. *Legionella pneumophila* of serogroups other than 5 was isolated from the tap water samples obtained from the nursery room. A new water dispenser was used for formula preparation. Filters were mounted to tap water sources in the nursery room. No further case of Legionnaires' disease was detected in the clinic. This report highlights the essentiality of nosocomial infection control in nursery rooms. *Legionella pneumophila* is one of the agents that causes neonatal pneumonia.

Keywords: neonate, Legionnaires' disease, nosocomial infection

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