Q Fever Endocarditis and a New Genotype of Coxiella burnetii, Greece

Ioulia Karageorgou, Nektarios Kogerakis, Stavroula Labropoulou, Sophia Hatzianastasiou, Andreas Mentis, George Stavridis, Emmanouil Angelakis

Author affiliations: Hellenic Pasteur Institute, Athens, Greece (I. Karageorgou, S. Labropoulou, A. Mentis, E. Angelakis); Onassis Cardiac Surgery Center, Athens (N. Kogerakis, S. Hatzianastasiou, G. Stavridis); Aix Marseille Université, Marseille, France (E. Angelakis)

DOI: https://doi.org/10.3201/eid2610.191616

Q fever is a worldwide zoonosis caused by an obligate intracellular bacterium, Coxiella burnetii (1,2). Although the classification of C. burnetii by the Centers for Disease Control and Prevention (Atlanta, GA, USA) as a potential bioterrorism agent resulted in the disease becoming reportable in many countries (3), Q fever is not considered a public health problem in Greece, and few cases have been recorded (3).

Underdiagnosis of Coxiella burnetii infections in Greece is possible because of lack of awareness by physicians, and most suspected cases are in patients with no bovine contact. We found serologic evidence of C. burnetii infection throughout Greece and identified a new C. burnetii genotype in the aortic valve of a patient with Q fever endocarditis.

etymologia

Mimivirus [mɪmˈɪ-vɪrəs]

Clyde Partin

If virus (Latin: slimy) challenges the definition of what constitutes life, the DNA mimivirus tests how we define virus. This unidentified “bacterium” infecting Acanthamoeba polyphaga, was isolated in 1992 from a hospital cooling tower in Bradford, England. Thus, the original name was Bradfordcoccus, and it was considered a culprit for a pneumonia outbreak at this hospital.

Researchers brought samples to Didier Raoult and colleagues at Aix-Marseille University, who eventually identified this “bacterium” as a novel virus in 2003. The physical size, genomic content, and ability of the outer protein coat to stain gram positive, thus mimicking (Latin: imitate) prokaryotic bacteria, indicated that this pathogen might be a bacterium.

Raoult initially claimed that the moniker meant “mimicking microbe” but later sheepishly recounted a childhood memory about his father, a physician–scientist, who created stories to explain evolution. Featured prominently in these whimsical narratives was an anthropomorphic character named “Mimi the amoeba.”

Sources

1. Redefining life [cited 2020 Jul 2]. https://www.rsb.org.uk/biologist-features/158-biologist/features/1490-larger-than-life

2. Viruses reconsidered [cited 2020 Jul 20]. https://www.the-scientist.com/features/viruses-reconsidered-37867

Author affiliation: Emory University School of Medicine, Atlanta, Georgia, USA

Address for correspondence: Clyde Partin, Emory University School of Medicine, 1365 Clifton Rd NE, Clinic A, 1st Fl, Atlanta, GA 30322, USA; email: wpart01@emory.edu

DOI: https://doi.org/10.3201/eid2610.ET2610