

Mycoplasma pneumoniae Outbreaks on Navy Vessels

It was a great pleasure to read the nicely written article published in the journal on an *Mycoplasma pneumoniae* outbreak on a U.S. Navy vessel (7).

Indeed *M. pneumoniae* outbreaks have commonly been reported in military settings, being attributed mainly to the close proximity of army personnel and recruits (1, 3, 5, 6). Two types of epidemics have been noted: smoldering epidemics that occur over several months and are generally harder to detect and investigate (2, 7) and abrupt outbreaks that last for very short periods of time (3). The latter type is more common in recruit camps and during the 1960s provided the basis for several large-scale *M. pneumoniae* vaccine studies in U.S. Air Force and Marine recruit camps (4).

One important historical note is that the current report follows at least one previous description of a shipboard outbreak on a U.S. vessel. An earlier report published in 1966 (6) described a similar epidemic on a U.S. Navy nuclear submarine. The major difference between these studies was that diagnostic methods have changed with time: in the 1960s, the diagnosis was based mainly on complement fixation assay (6) or culture in some unique cases, whereas in this new study the diagnosis was based on DNA amplification carried out on throat swabs.

In a similar vein, serological responses were not evaluated in this report. Determination of the rate of seroconversion might have yielded a higher number of cases in this outbreak (3, 8) or at least some useful information about the sensitivity of molecular diagnosis.

REFERENCES

1. Feikin, D. R., J. F. Moroney, D. F. Talkington, W. L. Thacker, J. E. Code, L. A. Schwartz, D. D. Erdman, J. C. Butler, and M. S. Cetron. 1999. An outbreak of acute respiratory disease caused by *Mycoplasma pneumoniae* and adenovirus at a federal service training academy: new implications from an old scenario. *Clin. Infect. Dis.* **29**:1545–1550.
2. Foy, H. M., G. E. Kenny, R. McMahan, G. Kaiser, and J. T. Grayston. 1971. *Mycoplasma pneumoniae* in the community. *Am. J. Epidemiol.* **93**:55–67.
3. Klement, E., D. F. Talkington, O. Wassergug, R. Kayouf, N. Davidovitch, R. Dumke, Y. Bar-Zeev, M. Ron, J. Boxman, W. Lanier Thacker, D. Wolf, T. Lazarovich, Y. Shemer-Avni, D. Glikman, E. Jacobs, I. Grotto, C. Block, and R. Nir-Paz. 2006. Identification of risk factors for infection in an outbreak of *Mycoplasma pneumoniae* respiratory tract disease. *Clin. Infect. Dis.* **43**:1239–1245.
4. Linchevski, I., E. Klement, and R. Nir-Paz. 2009. *Mycoplasma pneumoniae* vaccine protective efficacy and adverse reactions—systematic review and meta-analysis. *Vaccine* **27**:2437–2446.
5. Mogabgab, W. J. 1968. *Mycoplasma pneumoniae* and adenovirus respiratory illnesses in military and university personnel, 1959–1966. *Am. Rev. Respir. Dis.* **97**:345–358.
6. Sawyer, R., and R. G. Somerville. 1966. An outbreak of *Mycoplasma pneumoniae* infection in a nuclear submarine. *JAMA* **195**:958–959.
7. Sliman, J. A., D. Metzgar, D. C. Asseff, R. G. Coon, D. J. Faix, and S. Lizewski. 2009. Outbreak of acute respiratory disease caused by *Mycoplasma pneumoniae* on board a deployed U.S. navy ship. *J. Clin. Microbiol.* **47**:4121–4123.
8. Thurman, K. A., N. D. Walter, S. B. Schwartz, S. L. Mitchell, M. T. Dillon, A. L. Baughman, M. Deutscher, J. P. Fulton, J. E. Tongren, L. A. Hicks, and J. M. Winchell. 2009. Comparison of laboratory diagnostic procedures for detection of *Mycoplasma pneumoniae* in community outbreaks. *Clin. Infect. Dis.* **48**:1244–1249.

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Author's Reply

In response to the letter from Dr. Ran Nir-Paz, we regret our oversight of the previous publication he correctly notes. Our efforts to address previous publications related to our discovery were focused on ships and did not include submarines. The noted manuscript is indeed a highly relevant paper, and we are glad that Dr. Nir-Paz's letter brings it together with our paper for future reference.

We also agree with his opinion that serological data would have been useful for the purpose of defining the full extent of the outbreak we described. The majority of samples from ill patients described in our report were collected before recognition of the outbreak and prior to active investigation through a program that provides only for collection and storage of throat swabs, hence limiting our ability to address serological issues upon investigation. We thank Dr. Nir-Paz for providing excellent cross-references and his expert opinion on this important subject.

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