Reply to Collignon and Kennedy

To the Editor—We read with interest the correspondence from Collignon and Kennedy [1] regarding the duration of carriage of resistant bacteria after travelers return from tropical regions. The authors discussed the divergence in duration using a study they published in 2010 [2] and the VOYAG-R study [3]. While the overall design of both studies is similar, some key points are not. Importantly, we considered multidrug-resistant Enterobacteriaceae (MRE) to be those that produced an extended-spectrum beta-lactamase (ESBL), a plasmid-encoded cephalosporinase (pAmpC), and/or a carbapenemase [4]. In the Kennedy and Collignon study, an “antibiotic-resistant Escherichia coli” was defined as an E. coli resistant to 1 or more of the following antibiotics: gentamicin, third-generation cephalosporin (3GC), or ciprofloxacin [2]. Kennedy and Collignon found that 25.5% (26/102) of travelers acquired a 3GC-resistant E. coli (producing an ESBL or a pAmpC, thus fitting the definition of MRE that we chose). As mentioned by the authors, the clearance of those bacteria was fast, with only 1 traveler (1.0%, 1/102) still carrying a 3GC-resistant E. coli 3 months after return, which is close to the pretravel baseline prevalence they observed (2%, 2/102) [2] and even lower than what we found (4.7%, 24/515) [3]. Thus, when using the same definition for MRE, we believe that our results in terms of MRE carriage are similar.

Furthermore, Collignon and Kennedy pointed at the follow-up of MRE carriage after return exclusively among the travelers who acquired an MRE (10.3% [24/233], 4.8% [11/230], and 2.2% [5/227] at 3, 6, and 12 months, respectively) [1], while we considered it more relevant to draw clinical conclusions based on all travelers (4.7% [24/515], 2.1% [11/512], and 1.0% [5/509] at 3, 6, and 12 months, respectively) [3].

We deemed it reasonable to assume that within 3 months after returning from a tropical region, one should be considered as a potential MRE carrier, but not beyond that time frame. This assumption is supported by the study of a large number of included travelers and by the use of sensitive microbiological methods. We are aware that the clearance of MRE varied in our study according to the area visited: 10.7% of travelers from Asia (18/168) were still carrying an MRE 3 months after return (and 4.8% [8/165] at 6 months). Nonetheless, we believe our message can be helpful to build a framework for the medical management of infected patients who return from tropical areas with no exposure to a healthcare institution abroad. As mentioned by Collignon and Kennedy, our conclusion may not be extended to situations such as carriage of multidrug-resistant Enterobacteriaceae and invasive procedures, but we are confident that our conclusion does apply to MRE.

Note

Potential conflicts of interest. All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

References


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