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 specific situations such as carriage of fluoroquinolone-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.

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