

Letter to the Editor

AMJ 2015 8(5)

Authors' reply: Dengue co-infection in a blood stream infection caused by *Stenotrophomonas maltophilia*: A case report

Corresponding Author:

Srirangaraj Sreenivasan
Dept. of Microbiology
Mahatma Gandhi Medical College and Research Institute
Pondicherry, India
Email: rangaraj.sreenivasan@gmail.com

Dear Editor,

We would like to commend Joob et al. for highlighting the importance of simple diagnostic tests in the detection of dengue co-infection in endemic countries.¹ However, some aspects of these tests need special consideration in the case of *Stenotrophomonas maltophilia* (*S. maltophilia*) infection. We would like to clarify the diagnostic value of these tests in such cases.

Tourniquet test is an easy and simple presumptive bedside test, which indicates capillary fragility and thrombocytopenia.² However, it is nonspecific and false-positive results have been reported in dengue-negative individuals.² Since *S. maltophilia* can cause thrombocytopenia, it may result in a false-positive tourniquet test, especially in individuals with capillary fragility.³ Furthermore, a negative result in tourniquet test does not exclude dengue. It has also been found to have low sensitivity (33.5–34 per cent).² Hence, it is unlikely to be a substitute for dengue serology.

Neutrophilia is a common observation in most bacterial infections, which was also found in our case. However, neutropenia is a common predisposing factor for *S. maltophilia* blood stream infection. Moreover, patients with *S. maltophilia* bacteraemia were reported to have increased risk of neutropenia.⁴ Therefore, complete blood count (CBC) may not have any additional diagnostic utility in such scenarios.

As pointed out by Joob et al., the management should focus on treating bacterial infection with appropriate antibiotics, whenever a bacterial pathogen is isolated from blood.¹ In our case, the empirical antibiotic (cefixime) was changed to co-trimoxazole after receiving the antibiogram report.⁵

Sincerely,

Srirangaraj Sreenivasan, Arunava Kali, and Sivaranjini Vijayan

Department of Microbiology
Mahatma Gandhi Medical College and Research Institute
Pondicherry, India.

References

1. Joob B, Wiwanitkit V. Dengue co-infection with *Stenotrophomonas maltophilia*. Australas Med J. 2015;8:121.
2. Mayxay M, Phetsouvanh R, Moore CE, Chansamouth V, Vongsouvath M, Sisouphone S, et al. Predictive diagnostic value of the tourniquet test for the diagnosis of dengue infection in adults. Trop Med Int Health. 2011;16:127–33. doi:10.1111/j.1365-3156.2010.02641.x.
3. Lai CH, Chi CY, Chen HP, Chen TL, Lai CJ, Fung CP, et al. Clinical characteristics and prognostic factors of patients with *Stenotrophomonas maltophilia* bacteremia. J Microbiol Immunol Infect. 2004;37:350–8.
4. Wang CH, Lin JC, Lin HA, Chang FY, Wang NC, Chiu SK, et al. Comparisons between patients with trimethoprim-sulfamethoxazole-susceptible and trimethoprim-sulfamethoxazole-resistant *Stenotrophomonas maltophilia* monocicrobial bacteremia: A 10-year retrospective study. J Microbiol Immunol Infect. 2014;28:00116–9. doi: 10.1016/j.jmii.2014.06.005.
5. Srirangaraj S, Kali A, Vijayan S. Dengue co-infection in a blood stream infection caused by *Stenotrophomonas maltophilia*: A case report. Australas Med J. 2014;7: 441–4. doi: 10.4066/AMJ.2014.2205.