

[LETTERS TO THE EDITOR]

The Authors' Reply to "The Addition of Prophylactic Antibiotics Can Achieve a Favorable Outcome"

Key words: sulfamethoxazole/trimethoprim, fluoroquinolone, immunosuppressive, *Stenotrophomonas maltophilia*

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The Authors Reply We appreciated the constructive comments by Fukuchi et al. concerning prophylactic antibiotics in our case (1). As they pointed out, one tablet of sulfamethoxazole/trimethoprim (SMX/TMP) a day to prevent *Pneumocystis jirovecii* pneumonia should have been considered for our patient receiving high-dose corticosteroids. In several cases, however, clinicians avoid administering SMX/TMP in allogeneic hematopoietic stem cell transplantation (allo-HSCT) recipients because of the possible adverse effects, including skin eruption, bone marrow suppression, and renal impairment (2). In the present case, 1,500 mg/day of atovaquone was prescribed as an alternative for *P. jirovecii* pneumonia prophylaxis in order to avoid potential bone marrow suppression with SMX/TMP administration. Before hospitalization, a patient with underlying bronchiolitis obliterans was prescribed amoxicillin/clavulanate for bronchopneumonia because oral pathogens had been detected in bronchoscopy specimens.

Although a recent systematic review and meta-analysis showed that fluoroquinolones had comparable effects on the mortality in cases of *S. maltophilia* infection as TMP/SMX, a sub-group analysis of patients with hematologic malignancies or neutropenia was not performed (3). In addition, several studies have shown that patients with hematologic malignancies are at risk of developing *S. maltophilia* infection even under treatment with levofloxacin or SMX/TMP at prophylactic doses (4, 5). Therefore, although SMX/TMP and

fluoroquinolone have *in vitro* efficacy against *S. maltophilia*, whether or not these agents can prevent *S. maltophilia* infections in a severely immunocompromised population, especially neutropenic patients after allo-HSCT, remains unclear.

In the present case, we speculate that host-based factors, including mucositis and the neutropenic period after salvage chemotherapy following second allo-HSCT, were key to the development of fatal enterocolitis caused by *S. maltophilia*, regardless of prophylactic antibiotics.

The authors state that they have no Conflict of Interest (COI).

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