

[LETTERS TO THE EDITOR]

The Authors' Reply to "Both Macro and Micro Filarial Treatment May Be Necessary to Treat Hydrocele Due to a *Wuchereria bancrofti* Infection"

Key words: *Wuchereria bancrofti*, lymphatic filariasis, diethylcarbamazine, doxycycline

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The Authors Reply We very much appreciate Fukuchi and Sugawara for their comments on the treatment of our lymphatic filariasis case (1). As they mentioned, diethylcarbamazine is predominantly a microfilaricidal agent with a limited effect on adult worms, which is the cause of the disease pathology (2). Albendazole and ivermectin share a similar pharmacological profile (1). For this case, we considered the addition of doxycycline after the initial diethylcarbamazine treatment. Doxycycline has not only a microfilaricidal effect, but also a macrofilaricidal effect through its activity against endosymbiotic *Wolbachia* (3, 4). It has also been shown to improve the lymphatic pathology and decrease the severity of lymphedema and hydrocele by depleting *Wolbachia* and reducing various vascular endothelial growth factors (4-6). This additional benefit has even been observed in chronic lymphatic filariasis patients without any ongoing infection (6).

Although we discussed this option with the patient, his priority was to undergo surgical repair of the left hydrocele. He also preferred to seek further medical care in his home country where medical practitioners had more experience re-

garding this infectious disease. Therefore, we did not have an opportunity to administer macrofilaricidal treatment. We were unable to include these details in our previous article due to word count restrictions. Hopefully, this reply resolves the concerns of Fukuchi, Sugawara, and other readers.

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

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