Use of anti-parasitic drugs in patients with renal failure

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Introduction
Renal problem is seen worldwide. There are many renal failure cases in several countries around the world. The management of the case is usually an important public health concern. An interesting issue on the management of renal failure patient is the case with additional concurrent medical disorder. In tropical countries where the intestinal helminthiasis is common, the management of the renal failure patient who has the concurrent intestinal parasite infection becomes an interesting issue in clinical nephrology. The great concern is on the efficacy and safety of anti-parasitic drug administration in cases with underlying renal failure. In this short article, the authors summarize and discuss on this interesting issue.

Anti-parasitic drug treatment in patients with underlying renal failure
1. Roundworm infection
Roundworm infection can be seen in several areas of the worm. The examples of important roundworm are hookworm and Ascaris spp. The roundworm infection is observable in patients with underlying renal failure. Regarding hookworm, it is reported as a possible hidden cause of anemia in hemodialysis patients. Wu et al reported the management of hookworm infection in the patient undergoing hemodialysis and showed that standard treatment was applicable (1). Regarding ascariasis, there are some reports on cases with concurrent ascariasis and renal failure problem. In those cases, the standard management of ascariasis can also provide good treatment outcome (2, 3).

2. Tapeworm infection
Regarding the important tapeworm infection, cysticercosis, the standard anti-parasitic treatment is proven effective and safe in patients with underlying renal failure (4).

3. Fluke infection
The use of standard anti-parasitic drug against fluke, praziquantel is proven safe and effective in cases with underlying renal failure. Pehrson et al reported the clinical observation on using praziquantel for treating a patient with schistosomiasis and chronic renal failure that the standard dosage was acceptable (5). Regarding paragonimiasis, Liu et al reported the success in the treatment of a patient with chronic renal failure while this parasite infection treated with a standard dosage of praziquantel (6). However, there is a report that praziquantel is a cause of renal injury in general people (7).

Conclusion
There is a chance that the patient with renal failure get intestinal parasite infection. According to the evidence in the published data, the anti-parasitic drug treatment is considered effective and safe for the patients with underlying renal failure.

Authors’ contribution
BJ and VW wrote the manuscript equally.

Conflicts of interest
The authors declared no competing interests.

Ethical considerations
Ethical issues (including plagiarism, data fabrication, double publication) have been completely observed by the authors.

Funding/Support
None.
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