Generic Statins and Angiotensin Receptor Blockers: Are They Really Useful in Ebola?

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I read the recent publication on using generic statins and angiotensin receptor blockers for management of Ebola with a great interest (1). As described by Fedson et al., the modification of host immune response due to use of generic statins and angiotensin receptor blockers could be useful in management of the patients (1). However, there are several concerns. First, the effective dosage of drugs to counteract the immunopathology should be considered. In the previous report by Wouters et al., short-term usage is not enough for expecting a protective effect on vascular cell (2). Second, although the direct invasion is not the main pathology at the vessel, the immune-mediated pathology is not always the main problem. The endothelium pathology at some organs such as kidney is due to a thrombotic event (3). Third, during infection, some pathological biochemical might be generated and this might directly affect the activity of the drugs. For example, nitric oxide, the level of which is usually high in serious infection (4), can diminish the efficacy of angiotensin receptor blockers (5). Nevertheless, the possible unwanted immunological reaction due to immunomodulation should be well studied. An unexpected superimposed problem might occur. For example, statin exposure has been proven to cause immune complex-induced myopathies (6).

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REFERENCES

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