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Anemia during Hospitalization in the Patients with Ebola Virus Disease

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Dear Editor-in-Chief

Ebola virus disease is the important emerging disease in Africa. This infection is deadly and has the main clinical feature as an acute hemorrhagic fever. The main hematological alteration in this infection is the platelet change. However, the change in other hematological parameters should be mentioned.

Here, the authors analyzed the available data on hemoglobin level among the hospitalized patients with Ebola virus disease in reported cases. Of interest, from all available reports (7 reports, 20 patients) on hospitalized patients with Ebola virus disease (1 – 6), there is no report on anemia on the first visit or hospitalization day. However, based on 2 reports (2 reports, 3 patients) with available data on following up hemoglobin level during hospitalization, all patients developed anemia.

The anemia can be observed between the 17 and 20 days of illness (average = 18 + 1.7 days). The decreased quantity of hemoglobin level from hospitalization day to the day when anemia is observed is between 2 and 6.9 g/dL (average = 4.6 + 2.5 g/dL). Based on these data, anemia can be the observed laboratory change in the cases with Ebola virus disease.

It is suggested that hemoglobin level should be regularly monitored and the risk period for anemic problem is on the 2 to 3 weeks of illness. Indeed, the etiology of anemia embraces many causes and it might be difficult to postulate Ebola causing anemia. Further studies to find the exact pathophysiology of anemia in the course of illness is suggested.

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